Gleanings in Bee Culture

Established 1873

CONTENTS

November, 1941

Honey Markets	672-673
How Can I Get a Good Price for My Honey? —Grant D. Morse	677-679
Honey Salesmanship—David I. Day	680-681
Queens for Quality—John J. Louzecky	682-684
Losses of Bees from Poisons in Utah—Jas. I. Hambleton	685
Package Bees vs. Over-Wintered Colonies—Ed. Braun	686-689
To Eat and To Give—Mrs. Benj. Nielsen	690-691
Honey for Health and Happiness—William Smukler	692-693
Whisky Quiets Bees—I. Isaksen	693
The Hoffman Frame—Allen Latham	694-695
An Old-Time Picture	696
The Pioneers in Beekeeping—E. R. Root	697
War Veterans Take up Beekeeping—Bradley Smollen	698-699
Miller's Method of Requeening—E. S. Miller	699
How Did Egg Get Above Excluder?—D. L. Woodward	699
More Money from Honey with Fewer Hives —Clarence Tontz	700
Second Glances—C. M. Isaacson	701
A. I. Root's Twice-Told Tale	702
Spinster Jane Says—	703
Just News	704
Editorials	705-707
From North, East, West and South	708-714
American Honey Institute News Notes	715
International Meeting—Dr. E. F. Phillips	716-717
Asked and Answered	718-719
Talks to Beginners—M. J. Deyell	720-721
Bee Sting Venom an Antidote for Snake Bites —Dr. B. F. Beck	723

Subscription Rates—United States, one year, $1.00; two years for $1.50; three years for $2.00. Single copy, 10 cents. Other countries, 25c per year additional for postage. Discontinuance—Subscription stopped on expiration. No subscriber will be run into debt by us for this journal. Change of address—Give your old address as well as the new and write the name to which the journal has heretofore been addressed. Remittance should be sent by postoffice money order, bank draft, express money order or check. Contribution to Gleanings columns solicited; stamps should be enclosed to insure return to author of manuscript if not printed. Advertising Rates—Advertising rates and conditions will be sent on request. Results from advertising in this journal are remarkably satisfactory. Advertisers' Reliability—While the publishers do not guarantee advertisements in this journal, they use utmost diligence to establish in advance the reliability of every advertiser using space in this journal.

Entered as second class mail matter at the Postoffice at Medina, Ohio, Published monthly.

The A. I. Root Company, Publishers, Medina, Ohio

E. R. Root and M. J. Deyell, Editors; M. W. Hobart, Assistant Editor; H. H. Root, Associate Editor; D. C. Babcock, Circulation Manager.

Root QUALITY
BEE SUPPLIES

HONEY CONTAINERS

LABELS

Get our prices

24-hour service

A. I. Root Co. of Indianapolis

121 N. Alabama St.
Indianapolis

Prices on Bee Supplies advanced Sept. 1.
Write for new prices.

To New York State Beekeepers:

Containers for 1941

We carry a full line of Hazel Atlas Jars, 5, 8, 16, 32 and 48 oz., and 2½ and 5 lb. glass pails. We also carry a full line of Continental Cans and Pails.

Extracting Equipment

There is a Root extractor for every beekeeper, no matter how large or how small. Don't lose half of your crop of nice honey by using a makeshift or worn-out extractor. Let us help you with your extracting problems. NO CHARGE FOR THIS SERVICE.

Your request on a penny postcard will bring our fall price list on everything needed to market your honey in the most attractive manner.

A. I. Root Co. of Syracuse

Midland Ave. and Tallman St.
SYRACUSE, N. Y.

Serves You Best

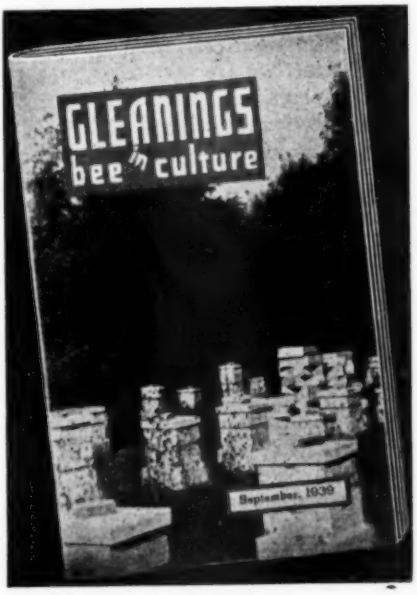
Send your cappings and old comb to MUTH for rendering into beeswax. . . . .
THE FRED. W. MUTH CO. Pearl and Walnut Cincinnati, Ohio

Solicit Subscriptions

Among Your Beekeeping Friends

A number of persons have written us for our offer to reliable persons. However, we still have a few localities where the right person can secure a number of subscriptions.
Write for sample copies
Give references.

Circulation Manager
Gleanings in Bee Culture
Medina, Ohio



ROOT SERVICE From CHICAGO

The logical place to get

Containers

is Chicago—a City of Will and Action. A hundred avenues of dispatch are ready to carry your order to you from here.

We have all the container packages offered elsewhere and good prices. Glass Pails, Glass Jars—three styles, twenty different glass packages. Tin Cans and Pails—all standard sizes. Comb Honey Cartons, Wrappers, and Shipping Cases.

Write for our new Container price list. A postal request will bring it.

A. I. Root Co. of Chicago
224 West Huron Street
Chicago, Illinois

HONEY --

Liquid Gold!!

Put up in attractive, clear glass or practical tin; neatly labeled and placed on your grocer's shelf is irresistible to the housewife. Be sure that you buy Sanitary, New Containers, however.

We still have a complete line of Glass and Tin in all sizes. Write for our Price Sheet. Shipment within twenty-four hours.

August Lotz Company
Boyd, Wisconsin

For Over 50 Years

Beekeepers in many lands have been pleased with this most important tool in Beekeeping. Your Bingham Smoker is offered for sale by numerous dealers. INSIST ON THE BEST
Manufacturers of a complete line of Honey Extractors, one for every requirement. Send for printed matter.

A. G. WOODMAN COMPANY
GRAND RAPIDS, MICH.

Prompt Service

HONEY CONTAINERS

Labels, Cartons, etc.

Fine stock of bee supplies.

Free parking.

The A. I. Root Company
516 Main Street
Norfolk, Va.

Prices on Bee Supplies advanced Sept. 1. Write for new prices.

Australian Beekeeping News
The Leading Bee Journal of the Southern Hemisphere is the
"Australasian Beekeeper"
Subscription 5 shillings per year. Start any time. Inquire for International Money Order for five shillings (Australian) at your Post Office.
Write now to The Editor, P. O. Box 20. West Maitland, New South Wales Australia.

The Monthly Honey Market

U. S. GOVERNMENT REPORT

Information from Producing Areas (last half of September)

California Points: Southern California.—The weather has been generally clear, with temperatures normal to slightly below. Most colonies are going into autumn with a good supply of honey and pollen and good clusters of young bees. Colonies in the hills have recently gathered some pollen from late buckwheat, turkey mullein, and other late plants, and in the orchard area from cover crop mustard and cultivated ornamentals. Some Blue Curl honey is being made in favored locations. Eucalyptus trees already have a few blooms. Seventy-five percent of the colonies in the orange area are reported going into cool weather with young queens. Prices have been generally steady, but trading has been limited, due to the fact that eastern demand for California honey was very light. Prices paid beekeepers for 120-pound cases of extracted honey in ton lots or more at Southern California delivery points—Orange, Extra White to Water White $6.30-6.60, White $6.00-6.30, Extra Light Amber $5.40; Sage, Extra White to Water White $6.30-6.60, White mostly $6.00, few $6.15; Sage-Buckwheat, Extra Light Amber mostly $5.40, few $5.50, Light Amber $5.40; Mixed Flowers, Extra Light Amber $5.40-5.45, Light Amber $4.50-5.00. Beeswax has been in moderate demand, with the market unsettled. Good quality beeswax has brought beekeepers 32-35c, mostly 32-33c per lb. delivered Los Angeles.

Imperial Valley.—Athel trees are said to be blooming abnormally as to dates this season, and the athel flow is now furnishing winter stores. Light Amber to Extra Light Amber Alfalfa is nominally $5.40 per case of 120 pounds.

Central California.—Temperatures have been near normal or slightly above on the Coast and slightly below normal in the valleys. Colonies average normal in condition and many are above normal. The supply of honey stores and pollen is good for the time of year. Bee forces are adequate and brood-rearing active. Spikeweed and blue curl are still yielding heavily, but the cotton flow is declining and the alfalfa flow is over. Bees are also gathering some nectar and pollen from wireweed, tamarix, rabbit brush, tarweed, and Russian thistle. The Blue Curl honey that has come in so far is said to be of fine quality. The crop as a whole may be below normal in quantity but up to average in quality. Though many of the larger beekeepers are holding for higher prices, there appears to be a slightly weaker market tendency, due to distress lots of honey being forced on the market. Sales by beekeepers in ton lots or more, per lb., delivered Bay Cities—Light Amber Mixed Alfalfa, Bean and Blue Curl 4½-4¾c; Light Amber Mixed Flowers 3¾-4c; Light Amber Sage-Buckwheat 4¼c; Delivered Interior Valley Points—Amber to Light Amber Mixed Flowers 3¼-3½c cans furnished; Extra Light Amber Lippia-Cotton 3½-3¾c cans furnished; Extra Light Amber Cotton 3¾c cans furnished; Extra Light Amber Cotton-Buckwheat 4¾c; Extra Light Amber Buckwheat 4½c. Sales delivered Los Angeles, per case of 120 pounds—Mixed Flowers, Extra Light Amber $5.40-5.45, Light Amber $4.50-5.00; Extra Light Amber Blue Curl $5.00-5.25; Extra Light Amber Cotton-Blue Curl $5.00-5.05. Beeswax dealers reported paying beekeepers 27c per lb. delivered Bay Cities.

Northern California.—Temperatures have been considerably below normal in the upper Sacramento Valley.Light rainfall reported on the extreme north coast and in the upper valley. Bees are in excellent shape for winter. Colonies are full of young bees and have an abundance of pollen reserves and honey stores. Many colonies still have an abundance of sealed brood. Thistle plants are drying up in most areas. Spikeweed is yielding, in some sections a very dark honey, but the flow is not up to that of last year. The alfalfa flow is generally over. The flow from cedar scale is spotted. Sales by beekeepers in ton lots or more, per lb., delivered Bay Cities—White Thistle 5¼c; Extra Light Amber Thistle blend 4¼-4½c, some 4¾c; Light Amber Mixed Flowers 4c; Delivered Interior Valley Points—White Thistle 5c; Extra Light Amber Thistle 4½-4¾c; Light Amber Mixed Flowers 4¼c.

Pacific Northwest: West of Cascades.—Rain has fallen frequently, in some sections setting a wet record for the month of September. Temperatures have ranged from moderate to cool. In some areas western dandelions and alfalfa are furnishing enough feed to enable the bees to maintain a living, but in general there is little on which they can work. Most colonies are strong in young bees, though brood-rearing is over and only small patches of capped brood remain. Some colonies reported low on pollen. The crop as a whole has been considerably below normal in size and quality and Fireweed honey in general has been mixed and darkened with Figwort, Thistle, Clover and other sources. Some colonies have been moved from fireweed sections into lower altitudes though the end of the flow is a couple of weeks away.

SUMMARY—The drouth which has prevailed for weeks in the East, and especially in the Northeast, continues, and reports are received of streams and wells failing, with forest fire hazards increasing. In New England natural water supplies are reported the lowest in 50 years. In marked contrast with this condition soil moisture is reported ample in most of the eastern Great Plains and adjoining States and some Northcentral localities report that so far this has been the wettest year in 40 years. Recent rainfall in the Central, Plains, and Western States has been beneficial to next year's honey plants. The late flow did not materialize to the extent anticipated in the East because of lack of moisture, and further west cool, rainy weather often interfered with bee activity. Yet colonies generally seem to be going into winter quarters with ample stores and with an ample supply of young bees. Some northcentral and northeastern beekeepers, however, expect that it will be necessary for them to feed in order to carry the bees through the winter. A late aster flow is still possible in the middle and southeastern States. Estimates regarding the size of the crop continue to lessen as the season progresses. What appeared to be a bumper crop at the beginning of the season has gradually been curtailed due to unfavorable weather conditions, until now it appears that the crop may be little if any

more than that of 1940, and may not equal that crop. Even this volume is only possible because of the unusually large crops in several of the Plains and nearby East-central States, such as Wisconsin, Minnesota, Illinois, Iowa, Nebraska, and Kansas, as the western and some of the eastern States were below normal in output.

The price situation continues irregular, with offers by large buyers ranging up to 1½c per pound apart for approximately the same color and flavor honey. Some bottlers are apparently finding sufficient distress lots of honey at the lower price levels to take care of their needs, but many beekeepers are holding in the anticipation of higher prices. In numerous sections the wholesale price has advanced proportionately more than the retail price. Considerable discouragement exists among some western beekeepers, especially in the Mountain States where even at the current slightly higher price levels the short crop was often insufficient to pay the season's expenses and some beekeepers are finding it necessary to find outside work to carry them through the coming months. The price of beeswax continues to rise as offerings steadily lessen. Some large buyers are now holding off because the outdoor bleaching season is over and are awaiting further developments, but enough other buyers are purchasing to keep the market trend upward. Yet even in the same State widely differing prices are being paid for beeswax. Receipts of foreign wax are expected to be relatively light for the next few weeks at least, unless shipping facilities improve. New crop beeswax will be available in South America in November.

Monthly Report of Honey Producers

Early in October we sent the following questions to honey producers: 1. What is the final average yield per colony to date this season in your locality of (a) extracted honey? (b) comb honey? Give answer in pounds. 2. How does this compare with the average yield for your locality? Give answer in per cent. 3. At what price has honey been sold or contracted for, if any, in large lots (carload or less) in your locality, during the past month, for (a) extracted honey, per pound? (b) comb honey, fancy and No. 1, per case? 4. What are prices when sold to grocers in case lots of (a) extracted honey in 5 lb. pails, or other retail packages in terms of 5 lb. pails? (b) comb honey, fancy and No. 1, per case? 5. What is the retail price to consumers in your locality for (a) extracted honey, in 5 lb. pails, or other retail packages in terms of 5 lb. pails? (b) Comb honey, fancy and No. 1, per section? 6. How is honey now moving on the market in your locality? Give answer in one word, as slow, fair or rapid. 7. What is the condition of the colonies for winter in your locality compared with normal considering the number and age of bees and the supply of stores? Give answer in per cent. The answers received are tabulated as follows:

Oct. Date			1. Final Aver. yield.		2. Com- par- ison.	3. Carload lots.		4. To grocers.		5. To consumers.		6. Move- ment.	7. Cond. of colo.
Rec.	State.	Name.	Ex.	Comb.		Ex.	Comb.	Ex.	Comb.	Ex.	Comb.		
9	S-Ala.	(J. C. Dickman)						.40		.50		Fair	100
16	B. C.	(A. W. Finlay)	53		98	.12		.75		1.00		Fair	90
13	S-Calif.	(L. L. Andrews)	75	0		.06				.50	.20	Fair	100
13	S-Calif.	(Geo. Larinan)	50			.05½				.50		Fair	60
20	SE-Colo.	(Otis E. Adcock)	25	0	25	.05		.40	3.50	.50	.20	Slow	75
8	E-Conn.	(Allen Latham)	68	45				.75	4.75	1.00	.28	Fair	100
9	S-Fla.	(C. C. Cook)	40		50	.04		.35		.50		Slow	100
10	C-Fla.	(Harry Hewitt)	160		200			.50		.65		Fair	100
9	SE-Ga.	(J. J. Wilder)	36	38*	50	.05½	.08*	.50	.55*	.60	.65*	Fair	100
13	NC-Ills.	(A. L. Kildow)	150	48	40	.07	0	0	0	.50	.15	Slow	100
13	S-Ills.	(Carl E. Killion)				.06⅛	3.12	.45	3.50	.60	.18	Rapid	100
9	NC-Ind.	(T. C. Johnson)	70	40	85			.50	3.00	.60	.19	Fair	90
9	NW-Ind.	(E. S. Miller)	85	60	85			.50	3.60	.65	.20	Fair	100
13	W-Iowa	(E. G. Brown)	250	200	150	.05½				.50	.15	Fair	100
8	C-Md.	(S. G. Crocker)	30	35	90			.60	2.80	.75	.25	Slow	85
13	N-Mich.	(Ira D. Bartlett)	80		64	.06		.45		.60		Fair	80
9	E-Mich.	(L. S. Griggs)	60	30	50	.06½	3.00			.50	.20	Fair	100
9	S-Mich.	(Floyd Markham)	200		150	.06	3.25	.46	3.60	.65	.20	Fair	100
9	C-Mich.	(E. D. Townsend)	40		50	.06						Fair	100
10	E-Minn.	(Floyd W. Ray)	120		100	.05		.40		.49		Fair	100
10	SW-Minn.	(L. A. Syverud)	85	100	100					.57	.15	Slow	100
20	C-Nebr.	(J. H. Wagner)	160	85	100	.06½	2.00		2.40		.15	Slow	100
13	W-Nev.	(Geo. G. Schweis)	20	15	20	.05	3.25			.45	.20	Fair	60
10	W-N. M.	(C. A. Baltzley)	90		90	.05		.45		.63	.20	Fair	100
8	NW-N. Y.	(Geo. B. Howe)				.06	3.50	.50	3.60	.65	.25	Fair	100
8	C-N.Y.	(F. W. Lesser)	140	100	50	.06½	3.10					Fair	125
8	NW-N.C.	(C. S. Baumgarner)		40	100			.75		.90	.25	Fair	100
9	SE-N.C.	(W. J. Martin)	75		50	.06¾		.60		.85	.20	Fair	90
9	C-Ohio	(R. D. Hiatt)	115	45	100	.06	3.25	.55	3.90	.70	.20	Fair	110
15	NC-Okla.	(C. F. Stiles)	50	0	95			.45		.65	.19	Fair	90
10	C-Pa.	(Harry Beaver)	130	70	130	.06		.50	3.40	.60	.17	Rapid	100
9	SE-Pa.	(D. C. Gilham)	60	30	110	.06½		.70	4.25	1.00	.25	Fair	90
16	SE-S. D.	(J. F. Norgren)	125	75	125	.05		.42	3.00	.55	.15	Fair	110
13	C-Texas	(T. A. Bowden)	20		20			.50		.60		Fair	75
9	S-Texas	(J. N. Mayes)	25	10	20	.03½		.35	0			Slow	50
10	S-Texas	(H. B. Parks)	48		98	.05		.47		.50		Fair	100
14	W-Vt.	(Phillip Crane)		35	75		3.85	.65	4.75	.85	.25	Rapid	100
8	N-W. Va.	(W. C. Griffith)	5	0	20					.45	.19	Slow	50
13	SE-Wisc.	(N.E. France)	100			.03		.25		.35		Fair	
10	N-Wyo.	(Earl C. Reed)	90		60			.40		.40	.18	Slow	75

*Chunk honey.

"Believe It or Not"

800,000 beekeepers' best friend is American Honey Institute

See page 715 for some of the Institute's activities

Help yourself by helping the Institute

Send remittance to
American Honey Institute
Madison, Wis.

Got a Hobby?

YOU'LL MEET the other leaders in your field when you read the magazine that is devoted exclusively to your interest. Rush your subscriptions today.

Per Year

$ .20 Poultry Keeper
1.00 Southwestern Poultryman, 3 yrs.
1.00 Dirt Farmer-Stockman
2.00 New Agriculture
.25 Poultry Breeders World
.50 Pacific Poultryman
.50 American Turkey Journal
1.00 New Hampshire Breeder, 3 yrs.
1.00 Cackle & Crow, the poultry paper
1.00 American Rabbit Journal
.50 Rabbit Monthly (Comm.)
1.00 American Fur Breeder
1.50 American Pigeon Journal
1.50 Pigeon News
1.00 Angora (Goat) Journal
1.00 Belgian (Horse) Journal
1.00 Hog Breeder (all breeds)
.50 Spot. Poland China Bulletin
1.00 Amer. Hampshire Herdsman
1 00 Sheep Breeder
1.00 The Sheepman
.50 Sou. California Rancher
1.00 American Cattle Producer
1.00 Red Polled (Cattle) News, 2 yrs.
.50 Fletcher's Farming
1.00 American Bee Journal
1.00 Beekeepers Item
1.00 Gleanings in Bee Culture
.50 Florida Poultryman & Stockman
1.00 Florida Cattleman & Dairyman
1.50 American Pecan Journal
.50 National Live Stock Producer
1.00 The Westerner (Livestock)
1.50 The Purebred (2 yrs. $2.00)

Rush your order today. All orders are acknowledged by return mail. Send cash, check, P.O.M.O., Exp. M.O., or stamps.

MAGAZINE MART

Dept. GB La Grange, Ill.

ROOT'S Goods in Michigan

—Root's Mail Order Grade Hives
Send for special new low prices.
—Three-Ply Foundation
Quantity rates on the larger orders.
—Sections
Both Mail Order Grade, and Standard Grade.
—Honey Extractors
Root Extractors are the best. Top prices paid for clean beeswax.
Send for catalog.

M. H. Hunt & Son

Lansing, Michigan

BEEKEEPERS ITEM

Serving the beekeeping industry for a quarter century without bias or prejudice. "The forum for the thoughtful." One year $1.00; two years, $1.50; sample copy, 3c stamp.

With Gleanings it provides a combination that covers the beekeeping field.

Both magazines for one year, $1.75.

BEEKEEPERS ITEM

P. O. Box 687 San Antonio, Tex.

2 Years $1.50

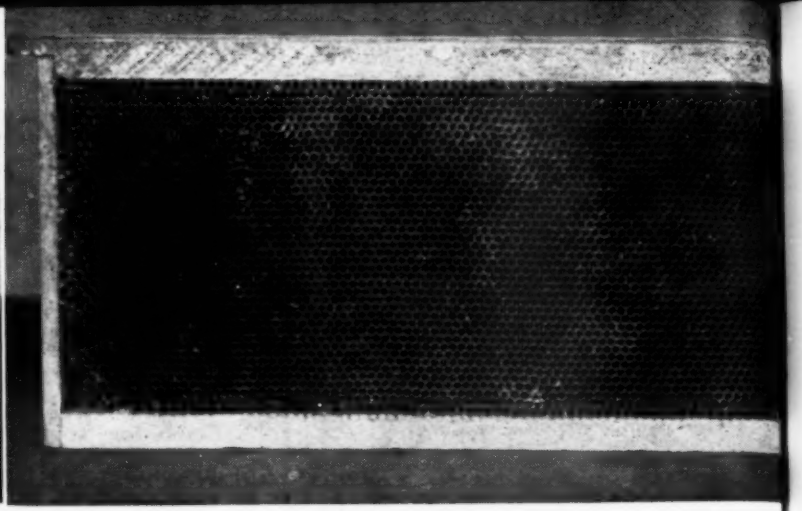
American Bee Journal—monthly: published and edited by beekeepers for beekeepers. Full of pictures and tips on care of bees and selling of honey.

—SAMPLE COPY FREE.

$1.00 a year, 2 years $1.50 in U. S. and Canada. Combined with Gleanings in Bee Culture, both magazines, **ONE YEAR, $1.60.** This offer good only in the United States.

Address—

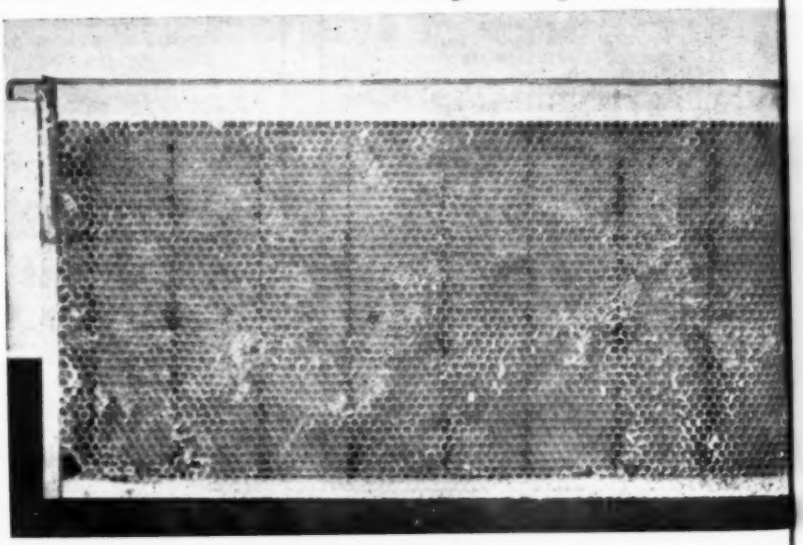
American Bee Journal, Hamilton, Ill.



This comb (upper one) was drawn 16 years ago. I have other combs just as near perfect and older but they could not be reached conveniently. I have no record of the number of times it has been through the extractor and it has been in many different colonies of bees. I want to tell you a California beekeeper is hard on combs. We often take combs with four to eight pounds of honey in them, 30 to 50 miles over the roads. I am convinced the life-long quality of combs from Dadant's Wired Foundation should give them twenty years of use, retain their shape and give the beekeeper 95% worker cell capacity. The lighter comb (lower one) was drawn in 1937. Note how nearly the two combs are alike in finish.

L. E. Orr,
Lemoore,
California.

Sixteen Years of Honey Crops and Bee



For Everlasting Combs Use Dadant's Crimp-wired Foundatio

The cheapest way to get good combs that will last a lifetime, is to have them drawn from Dadant's Crimp-wired Foundation above the brood nest in a good honeyflow. The slightly higher cost per comb will be paid for many times each year in extra production. Combs that sag, stretch and buckle are expensive no matter how little you pay for the foundation. They go into the melting pot quickly. This means a double loss, loss in replacing the foundation, and loss of time and honey for the bees.

Save from the start. Use Dadant's Crimp-wired Foundation.

DADANT & SONS, Hamilton, Illinois

Makers of Famous Foundations . . . . . Crimped-wired—Plain—Surplus

Vol. 69
No. 11

Gleanings in Bee Culture

November
1941

How Can I Get a Good Price for My Honey?

By Grant D. Morse

Before attempting to give a direct answer to that question, let us set down a few facts that will help clear our thinking:

1. There has never yet been an over-supply of honey.
2. Low prices are largely the fault of the producer.
3. Most honey producers are not good salesmen.
4. The average producer seeks to sell his product in one way.
5. The producer is too often driven to a low selling price because of financial embarrassment.
6. Honey is not well advertised in most communities.
7. Honey is not well packaged in many instances.
8. There is little cooperation among honey producers.
9. The retail purchaser of honey is not assured of uniform quality.
10. The supply of honey to the market is seasonal, not steady.

If the ten statements above are even nearly correct, they provide ample explanation of present low prices.

How can better prices be secured?

1. Bring about as much cooperation as possible with other producers in your area.
2. Try to arrange a reasonable scale of prices. Establish minimums, at least for certain quantities.
3. Always assure the purchaser of standard quality under established labels.
4. Do not attempt to market all of your supply in one kind of container, or to one type of consumer.
5. Refuse to be stampeded into price-cutting competition; arrange credit if necessary.
6. Package your honey more attractively.
7. Be willing to spend something on advertising.
8. Give more time to selling; don't assume honey will sell itself.
9. Keep a supply on hand for the year-around user.
10. Work with producers of other foods that are used with honey.

Bring About as Much Cooperation as Possible with Other Producers in your Area

Until such time as state-wide cooperation comes (if ever) there are many communities or areas where cooperation with other producers could be accomplished. I am not implying the necessity for a cooperative in the strict meaning of that term. Beekeepers in their regular meetings could reasonably arrange for agreement in essential matters. Producers of other commodities manage cooperation, and almost always profit therefrom. I know of almost no attempt being made by honey producers to cooperate in the thousand and one details involved in profitable selling.

Try to Arrange a Reasonable Scale of Prices. Establish Minimums, at Least for Certain Quantities

One of the most important essentials of cooperation in a given area is the matter of reasonable price limits. At the present time the beekeeper often sells without adequate information about supply and demand. He often has no idea of the price his neighbor is getting. His own asking price may be too high or it may be too low. It would not always be necessary for every producer to agree to sell at the minimum price. The privilege of selling at a higher price than the minimum could reasonably be reserved, particularly where the quality of the product is high.

Always Assure the Purchaser of Standard Quality Under Established Labels

Too many honey producers are careless about supplying the trade with honey that is the same under a given label each month of the year, year in and year out.

Every one of us knows from personal experience that the human taste is fastidious and demanding—particularly in this age of such a wide choice of sweets. A customer who fails this month to get the same flavor of honey that he purchased last month under a similar label may lose his desire for honey temporarily or even permanently. Meanwhile some other delectable sweet becomes a matter of habit with him.

Many producers label their different flavors of honey carefully. This is worth all the time it takes. If in any given season a producer's crop is of inferior quality, the advantage he gains by marketing it under the old label is short-lived. He might much better sell the inferior product for some use in which flavor is not so important, and buy from some fellow producer to supply his retail trade. Selling an inferior grade of honey for table consumption at a low price does not make it right.

Do Not Attempt to Market all of Your Supply in One Kind of Container, or to One Type of Consumer

Too many producers, I think, make the mistake of trying to sell their entire crop to a narrow market, and in one type of container. They take the attitude that they are wholesale producers, and do not care to spend time and effort in a variety of retail fields. This attitude is all right if conditions enable them to secure a fair price in this way. But many fail to do so.

Meanwhile, their local stores, road stands, bakers, and others are not supplied with honey. Or, if they are provided with honey, it is usually in small jars put up by some metropolitan packer, so packed and so labeled that it has to compete on not better than even terms with every other common sweet.

Personally, I don't like the honey I buy in the metropolitan packer's jar. It's too thin and syrup-like to suit me. I like to have my honey crystallize, too. Perhaps that's a personal preference, but I think not. Most people, I believe, prefer candied honey.

Too often, too, the baker is using some other sweet in his pastries than honey and paying as much or more for the less desirable ingredient.

Refuse to be Stampeded into Price-cutting Competition; Arrange Credit if Necessary

Some honey producers cut prices in a panic. The wholesaler often scares them into this with a low bid. They assume, on less than all the evidence, that the market is glutted, and so give up. I have been told of one party that makes an offer, then a few hours after the offer is received, and the honey producer is about to make shipment, wires a lower bid. If this is accepted, he has been known to wire a still lower offer.

The individual producer is rather at the mercy of the packer unless he has a cooperative agreement with his neighbors. The packer can play one small producer against another.

One wholesaler in my neighborhood has told me personally that he can usually buy honey cheaper than he can produce it himself.

"I don't know why the darn fools sell so cheap," he says, "but they do."

Investigate the retail prices in any good-sized community. You will commonly find five-pound pails selling anywhere from 45 cents to $1.00 and section honey from 15 cents to 30 cents. Somebody must be wrong!

It occurs to me that some producers put a lower estimate on their honey because they don't know what its true value is, they don't know what it really costs to produce the honey, and they simply can't believe that anyone will pay a fair price for

it. Sometimes I feel like sizing up such fellows and concluding they put a low estimate on their honey because they themselves have an inferiority complex.

Many, of course, sell hurriedly and at low prices because they are pressed for money. That problem isn't easy to answer. It demands good management, the maintenance of one's credit, and the willingness to offer the season's crop as security for credit until a fair price can be secured.

Package Your Honey More Attractively

Much could be written on this point. Today a commodity must appeal to the eye as well as to the taste to be sold. Best of all, manufacturers of glass, and printers of labels are ready to fill this need. Some beautiful containers are available. Attractive labels are yours for the selecting. Of course, you must use good taste, especially in labels. The brightest colored labels are not necessarily the best. Take so small a matter as five-pound pail labels. Most producers use a small, poorly designed label when an all-round-the pail label is so much more attractive. Certainly here is one place where the small fraction of a cent saved is not a fraction of a cent earned!

Chunk honey, I believe, is not offered commonly enough either. It particularly enhances the attractiveness of honey in glass.

Be Willing to Spend Something on Advertising

And why think that you can accomplish satisfactory sales without spending anything on advertising? How many honey producers do advertise in any way besides putting up a sign? Everyone else who has made a success of selling anything spends a goodly percentage of receipts on advertising. Is honey so good it can be made an exception? Present prices provide the answer.

Give More Time to Selling; Don't Assume Honey Will Sell Itself

Unless the honey producer can secure a satisfactory price from a wholesaler, he cannot afford to neglect the selling end of his business whether he likes it or not. Not only is time required, but one's heart must be in the task. How much honey would most of us produce if we gave ourselves as grudgingly to the production work as we do to the selling end?

Letters have to be written. And they should be reasonably well written. Good stationery helps. A typewriter helps more sometimes. Samples (honest samples) need to be submitted freely. And they should be well made up else they recommend the sender as the careless fellow he is. Trips may have to be taken. But why not? Isn't it worthwhile? Time even to build up a retail trade may have to be given. But it is in a good cause. Selling in small lots may irk some, but it all adds up and helps build volume.

Keep a Supply on Hand for the Year-around User.

The importance of this practice would appear obvious. But too high a percentage of honey producers fail to keep a supply of their product on hand. Many think this makes for greater desire on the part of the user to buy when he next gets a chance. This is only partially true. Remember that absence in any field may make the heart, or whatever it is) grow fonder for something else.

Work with Producers of Other Goods that are Used with Honey

Honey producers, chiefly through advertising, can increase consumption of honey by boosting foods that contain honey. The American Honey Institute is the best medium for this type of advertising. We all recall the recent award in a nation-wide contest to a cook who used honey in preparing ham for the table.

More should be done to advertise the virtues of honey in baked stuff. By using advertising methods that are psychologically sound, honey producers could greatly increase the popularity of baked goods containing honey.

Candy makers have found out that the use of the word honey in certain brands of candy helps sell their product. More honey should be used in coffee, with fruit, and cereals, and in baby's food. Mrs. Benjamin Nielsen's page in this magazine is doing its bit to help the increased use of honey.

These suggestions are but a smattering of the whole truth. Great things are in store for honey, but honey's place in the Nation's diet will not come until most of these things of which we all know, but practice so little, are accomplished.

Saugerties, N. Y.

Honey Salesmanship

By David I. Day

Now that more money is in circulation because of the national defense activities, it is a good time for small local beekeepers to get back to the old methods of some years ago, selling extracted honey through local stores. A number of old-timers built up a nice volume, in fact, for both comb honey and extracted honey, dividing profits with the local grocers. A small southern Indiana beekeeper informed me lately that up until 1924, ten stores took all the honey he could produce.

Just recently, the writer, in connection with his Indianapolis Star column called "A Look About at Rural Life in Indiana", ran an informal beekeepers' survey of the state, utilizing much information from the office of James E. Starkey, secretary of the Indiana State Beekeepers' Association and also state bee inspector. This information regarding bees and beekeepers over the state, where the bees pastured and where the honey was marketed, had a two-way effect. The writer was rather astounded at the scope of the business. Readers were similarly impressed and several told me they went out to some of the beekeepers mentioned and bought honey. They explained that they "had sort of got out of the honey habit."

It's the beekeeper's business not merely to produce and properly package good honey but to get people back in the "honey habit." Not merely because the writer happens to be a farm writer and columnist for a great daily newspaper but purely in an impersonal way, let us say that the big and little beekeepers ought to be more closely in touch with the big and little newspaper boys. They have "sort of got out of the honey habit", too.

Every newspaper of any size has a man especially set apart to some extent for farm writing. He is a keen chap quite often and will be tickled pink to have the friendship of beekeepers. He will drive out, write out, telephone out and otherwise pester you to death. But, believe me, the items about bees and honey will be in the paper. And about a dozen times a year, there will be some excuse to write an illustrated feature story, often to be prominently displayed in the Sunday issue. Take a state like Indiana with dozens of dailies, all puffing the honey interests and it will create an undreamed of volume of business in time. Not right away. Publicity doesn't work by jerks. It works more in the nature of a long slow steady pull.

Add to all this the friendly county newspapers, over 300 very fair ones in Indiana, about the same number in proportion to population from coast to coast. Their editors will give any beekeeper space and sell him space, too—and get all 15,000 of these sheets working and maybe you think that folks won't be influenced, that friends for honey won't be made thereby.

In addition to selling locally through stores, it won't hurt a bit to get back on the old house-to-house canvassing basis, not merely the little beekeepers but the biggest beekeepers in the land. Haven't the time? All you little beekeepers have many a long idle day wherein you can take the old flivver and make $10 easily. You get folks back in the honey habit, too—for the old personal shoulder-touch will affect a lot of people who read little and listen less to the radio. Of course, the big honey producer can't personally get out and solicit business from door to door—his territory is too big, his output too big. But he can sell the honey direct **by proxy**—through regularly appointed salesfolk.

The writer has before him a current copy of Opportunity Magazine, published in Chicago for salesmen only. It goes monthly to thousands by mail and is sold on news stands all over. The striking thing about the magazine is **the number of hatcheries advertising in it for salesfolk to sell baby chicks.** They are getting the salesmen too—hundreds of them, topnotch, high and low pressure salesmen—women, men, boys, girls —taking orders for many millions of chicks. And nurseries all over the land in it advertising and securing salesmen to sell fruit trees and shrubs. And manufacturers calling for wagon salesmen to sell household necessities from farm to farm, from village to village. Some of these

folks sell fruit trees and chicks and some other things, too. **Why not honey?**

In this work of selling honey direct, the big beekeepers by proxy and other sales material obtained can use bales and bales of literature and other sales material obtained through various avenues of the beekeeping industry including the national beekeeping journals.

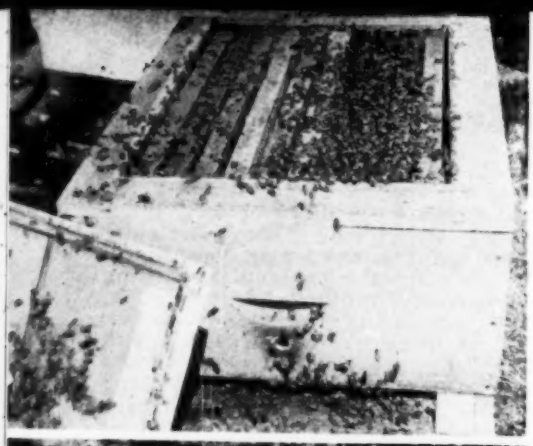
Advertising is more than printed words in paid-for space. Publicity is more than articles and photographs in the news columns. You can get fine publicity by displays. Take the State Fairs. They have beekeeping displays that take people's breath. But it usually stops there. The local beekeepers rarely have honey displays at the county fairs. They stand away off cold and aloof from the domestic science departments of the public, private, and parochial schools. They never display, distribute any printed matter, or make any talks at the farmers' institutes, county or township. They ignore the home economics clubs and the 4-H clubs and the Future Farmers of America. Most beekeepers do—there are a few not guilty.

To be honest about it, a check-up shows but one or two agricultural vocational schools in the State of Indiana doing beekeeping work. These are doing **fine work.** The trouble is simply that there aren't enough of them. Just recently a small Indiana college lost its science teacher to become an apiary inspector. In connection with his resignation, the news leaked out that this man had been a real influence for good, stimulating beekeeping in a couple of counties. A newspaper man, specializing in rural stories, only thirty or forty miles away exclaimed: "They certainly kept that a secret a long, long time."

Too many things about beekeeping —successful ventures, the marketing, the processing of honey—which would make fine newspaper and magazine articles—are more or less kept secret. The feature writers, farm paper field men, the country editors are throwing their columns open to beekeepers. Many of their generous offers to cooperate are ignored. Beekeepers are better "copy" than hog farmers or corn growers or dairymen. Beekeepers are in a rather unusual and, from the public's standpoint, a somewhat mysterious vocation. The beekeepers are in a business with color, charm, and romance — whether they operate in the mountains, on the prairies, along rivers, or by the seaside. The publications, with any encouragement at all, are eager to exploit these features of the beekeepers' profession.

That bashful attitude of most beekeepers might have been a good one once but in the complex society of today **the man or industry succeeds best who "hollers" loudest.** The beekeepers of the world have a lot to "holler" about and when they get ready to make themselves seen and heard, we'll hear less of beekeepers with four or five tons of nice clover honey being insulted with offers of six cents or seven cents—fewer instances of beekeepers reporting that they're going out of business because the old days "when people liked honey are gone forever".

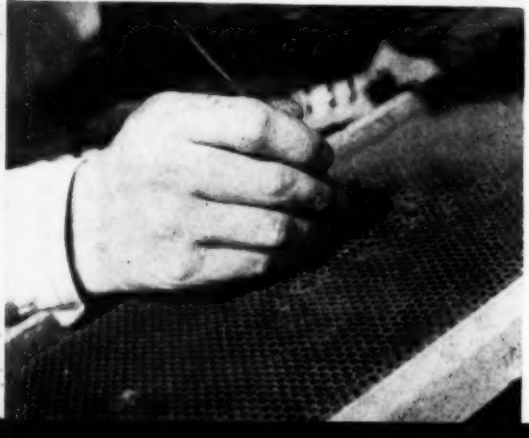
Tennessee beekeepers at their summer meeting at the Blaylock home at Fosterville on August 9, 1941.—Photo from J. M. Allison.



No. 1—For best results a large population of bees should be in the accepting colony.

No. 2—A liberal feeding of sugar syrup prior to introducing the grafted cells.

No. 3—Proper selection of desired larvae is necessary.



No. 4—Light coming over the shoulders so that the larvae can be easily identified.

Queens for Quality

By John J. Louzecky

Fancy, medium, or poor? Grade your own queen bees and see how they compare with the queens of your fellow beekeepers. There are $2,000,000 worth of queen bees in the United States today, and there is no doubt but that their value could be increased to $4,000,000 if more selective queen-rearing were practiced.

Although many beekeepers realize that one of the most vital prerequisites of large honey crops is a queen with a good genetic background, they do not make use of that knowledge. It is a generally conceded fact that certain strains of bees yield much larger crops of honey on the average over a period of years than do other strains. True enough, the condition of the colony at the time of the honey flow is an extremely important factor in insuring large yields; yet a few strains of bees will, when placed under comparable conditions with other strains, yield not only larger, but more uniform honey crops. Experiments carried on by the United States Department of Agriculture within recent years prove beyond all point of doubt that certain strains of honeybees can and will make more money for the beekeeper from a production standpoint.

There are two faulty practices which the average beekeeper follows. First, he usually buys his queen bees by advertisement, using price and the word of the advertiser as his only criterion of quality. This practice is a poor one because the beekeeper has no guarantee that the queens he buys are of good genetic stock. Second, he requeens his hives every fall in the belief that queens

are good for only one year. Experiments have shown that queens may be used advantageously for two years and sometimes three. In tests carried on near Columbus, Ohio, in 1940 with two-year-old queens, data showed the average yield for the entire apiary to be approximately 150 lbs. of honey per colony, a yield

No. 5—Extreme care should be exerted in placing larvae in the cell base.

which was as good as or above the average for that area and for the state in general during that year. The fact that two-year old queens were used for the experiment, and the additional fact that these same colonies had been divided once to form a new yard, proves conclusively that under favorable conditions colonies need not be requeened each year, nor even every other year. Some queens have served well for three years before being replaced.

The cost of requeening is, of course, one of the important restricting factors in the problem of supplying new and better queens. That problem can be successfully and economically met if the beekeeper will secure his stock from a reputable producer, and then from that

No. 6—Hive queenless for five hours. Twenty grafted cells are placed in the hive.

strain do his own queen-rearing. He will develop a strain with a good genetic background which will raise his honey production in the long run. You think queen-rearing is difficult? Not at all. If the beekeeper has a thorough knowledge of bee behavior before he starts and then uses the correct technique he will be able to rear his own queens very successfully.

In selecting stock from which to take queens, the largest honey-producing colony for any single year is

No. 7—Eighty-five percent of 40 cells accepted, and ready for use.

by no means the only criterion to use. Good color, size, lack of swarming impulse, temperament, and pro-

No. 8—Nineteen cells finished. Only 16 are desirable to use.

lificness are all qualities which should be considered, the latter point mentioned being particularly importmentioned being particularly important. Even though the size of the her egg-laying capacity, if the correct hereditary factor is not inherent within the strain, the progeny will not be as prolific as they should be for large honey crops, regardless of their size.

After the beekeeper has chosen a good strain of bees from a reliable producer, he may start rearing his own queens. The technique used in grafting young larvae is made easier by following a few experience-tested rules. First, always graft when there is plenty of light, and work with the light coming over the shoulders. Then select larvae 12 to 24 hours old, or about $\frac{1}{16}$ of an inch long. Be certain that all of the cell cups are made from fresh beeswax and that they are scrupulously clean. Next have an ample supply of fresh royal jelly on hand. Prepare a box large enough to hold cell bars, and line it with wet cloths in order to obtain as high a humidity as possible. Have the following equipment ready for use: standard frames altered to hold cell bars, a grafting tool, a cell adjustor, wax cells, cell cups, and of course, the royal jelly. When everything is ready, work rapidly and efficiently as a great deal of the success of the operations depends upon the speed with which the beekeeper works.

The actual process of grafting requires much skill and patience. On each bar twenty cell cups are placed, and into each cell a diluted drop of royal jelly is inserted. Next a frame of young larvae is removed from the desired hive. It will be noted that the larvae are cresent-shaped, and it is under the center of the bend in the crescent that the grafting needle is placed. The larvae are gently removed and placed on the royal jelly in the cell cups. After all of the cells have been grafted on one bar, the bar should be put into the humidity box where it should be kept until the grafting is finished so that the larvae will not be injured by drying. If the larvae become dry they will not be accepted by the nurse bees, the queen cell will not be developed, and the beekeeper's work will have been for nothing. Similarly, if any of the larvae are injured during the process of grafting, they should be replaced immediately. The completed bars are placed in the frames and are ready to be inserted into the center of the prepared colony.

To prepare a colony to rear queen bees, the beekeeper again calls upon his knowledge of bee behavior. It is a well-known fact that every colony needs a queen, and that if the queen is removed the bees will meet the emergency by starting to develop a new queen. Therefore, the beekeeper should select a strong hive, reduce it to a single story, make it queenless, and remove all eggs and unsealed brood. The hive should be left in that

(Continued on page 730)

No. 9—Large queens result from large cells. Inferior cells on left should be discarded.

No. 10—Requeening can be effective and successful by killing old queen several hours prior to cell introduction.

Losses of Bees from Poisons in Utah

Fruit Spraying the Main Cause of Losses

By Jas. I. Hambleton

Jas. I. Hambleton.

[Our readers have been told of heavy losses of bees in various parts of the country as a result of arsenical dusts and sprays applied on farm crops to destroy various noxious insects. In a few cases whole apiaries have been wiped out in a single night. It appears that the Utah Agricultural Experiment Station and the U. S. Bee Culture Laboratories, under Jas. I. Hambleton, in various parts of the country, particularly in Utah, have been giving this matter some careful study. As a result of this work there has been issued a bulletin, E 545 U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine, that gives information of value. Mr. Hambleton, head of the investigational work, has sent us the brief below which should be read by all beekeepers in the infested areas whether in Utah or elsewhere. It will be shown that not all agricultural spraying or dusting of poisons kills bees. There is more trouble in any case during a dearth of nectar.—Editor.]

We are sending you two copies of "A Report of Investigations of the Extent and Causes of Heavy Losses of Adult Honeybees in Utah", by A. P. Sturtevant, G. F. Knowlton, J. D. Hitchcock, G. H. Vansell, E. C. Holst, and W. P. Nye which has just been published as E-545 of the Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture. Because of the apparent increasing seriousness of bee losses, particularly in 1939, and the growing opinion among Utah beekeepers that at least certain of these losses were associated with grasshopper control activities, the Utah Agricultural Experiment Station initiated investigational work during early August 1939. This was continued in May 1940 with the assistance and cooperation of the Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture. Copies of this publication may be obtained without cost from the Utah Agricultural Experiment Station, Logan, Utah, the Division of Bee Culture, Beltsville Research Center, Beltsville, Maryland and the Intermountain States Bee Culture Laboratory, Laramie, Wyoming.

The paper describes and discusses the various field observations, experimental investigations, and results of chemical analyses carried on in connection with this problem.

Significantly high amounts of arsenic trioxide were found in only a comparatively few samples of bees received mainly from two locations where exceptional death rates were observed during 1940. Except for these, relatively few samples of bees showed much higher amounts of arsenic than samples designated as having come from normal colonies.

Samples of pollen and water showed no significantly high amounts of arsenic.

Most of the soil samples showed a certain amount of arsenic, but this was excessive in only a few cases and these came either from heavily sprayed orchards or from the neighborhood of smelters. A few soil samples that had had contact with grasshopper bait showed somewhat more arsenic trioxide per gram of soil than did the average run of soil samples.

Samples of sweet clover blossoms and apple leaves from heavily sprayed orchards and samples of bees from sweet clover blossoms showed excessive amounts of arsenic trioxide per gram of material.

The field observations and the results of analyses of samples of bees and other materials for arsenic reported give little, if any evidence that grasshopper bait has any significant importance in causing losses of honeybees.

No evidence was found that grasshopper bait is attractive to honeybees whether prepared with or without molasses, banana oil, sugar sirup or honey during the summer months.

(Continued on page 731)

Package Bees vs. Over-Wintered Colonies

By Ed. Braun
Dominion Experimental Farm,
Brandon, Man.

[This article was taken from the February, 1941, issue of Western Canada Beekeeper.—Editor.]

Package bees and over-wintered colonies both have a definite place in the economic plan of the beekeeping industry in Manitoba. If it became absolutely necessary, it would be possible to do without package bees which were only developed on a commercial scale in very recent times, around 1915. However, if package bees were abolished, beekeepers would be forced to overwinter their colonies in order to maintain their investments and means of livelihood. The annual importation of package bees into Manitoba has increased from a few thousand dollars worth prior to 1925 until the valuation exceeded the $100,000 mark in 1939. Even with this tremendous increase in the purchases of package bees, a large percentage of the beekeepers of the province still continue to over-winter all or a portion of their colonies every year. If package bees were to entirely supplant over-wintered colonies, the present capacity of the package shippers in the southern states would be entirely inadequate to meet the demand from one province alone, not considering the other nine provinces in the Dominion.

The popular trend towards package bees, however, does not necessarily indicate that the trend being followed is based on sound experimental evidence; it may just be a passing fad, supported by beekeeping authorities because it follows the path of least resistance. It may, therefore, be of considerable value, from an economic standpoint, to review the past fifteen year period at the Dominion Experimental Farm, Brandon, Manitoba. Farmers' Bulletin 11, entitled "Package Bees in Manitoba", on page 13, outlines tabular data giving the factors considered in deriving the profit and loss figures for Outside-Wintered versus Package Bee colonies. The following table outlines twelve years' results as compared with seven years' results published in the above mentioned bulletin.

The difference of $1.83 in favor of the over-wintered colonies should dispel the theory that it is cheaper to kill the colonies in the fall and buy package bees in the spring than to over-winter the colonies of bees in the province of Manitoba. The average beekeeper may not consider a profit of $1.83 per colony of sufficient difference to warrant the additional time and labor involved in preparing and over-wintering his colonies but when you consider that his monetary investment in extra equipment and labor charges have already been assessed against the over-wintered colonies, then, on a basis of one hundred colonies, a total profit of $183.00 may mean the difference between a profit or loss on the season's operations.

Naturally the production factor enters into the above calculations, and twelve years' figures on the average production from cellar- and outside-wintered colonies combined versus package bees shows that overwintered produce 27.40 pounds more, per colony, than do package bees; the average production, per colony, from the over-wintered being 171.56 pounds as compared with 144.16 pounds from package bees. Evaluating honey at six cents per pound, would provide an additional gross income of $16.44 per colony from over-wintered colonies compared with that received from package bees.

The favorite argument of the proponents of the "Kill your colonies in the fall and buy package bees in the spring" theory may be briefly summed up as follows: "Fifty pounds of honey for each over-wintered colony, at six cents a pound, amounts to $3.00 per colony; in addition there must be added the possible chance that the colonies may be dead or weak in the spring, and the labor and worry of preparing the colonies for winter and unpacking them in the spring. A two-pound package with untested queen may be purchased for $2.00 or less, plus the cost of express which may vary from 45 to 75 cents, making a total of $2.53

or $2.83. Why incur the investment, labor and worry of over-wintering your colonies when you can purchase package bees so cheaply?" However, let us examine this argument to determine whether all of the facts have been fairly represented.

Assuming that the average price of a two-pound package of bees to Manitoba beekeepers, with express included, amounts to $2.60; to this amount must be added the expense of procuring the package bees from the railway station, the loss or damage to bees and queens in transit, the labor of preparing the hives and installing the package bees, the cost of and labor of feeding twenty pounds of honey or sugar, in syrup form, per package colony (amounting approximately to $1.20), the loss of queens on introduction, the loss or weakening of producing units through drifting and finally the loss of queens through early supersedure, with the ultimate reduction in yield from package bee colonies so affected. This does not include the foreign exchange rate of 11 per cent on Canadian money, or the 10 per cent excise duty, which may vary considerably in the different seasons.

Furthermore, purchases amounting to more than $100 require, at the present time, an import license from the "Foreign Exchange Control Board." The costs assessed against over-wintered colonies may vary, depending upon the method of wintering employed; namely, a bee cellar, or outside in different sized wooden cases, balsam-wool or paper packs. However, the following items should be taken into consideration: The cost and labor of requeening all colonies headed by two-year-old queens during early August; the cost and labor of supplying each colony to be over-wintered with 55 pounds of honey of the best quality, valued at $3.30 less the cost and labor of extracting and marketing the same; depreciation reserve on the capital investment in the bee cellar, packing cases or packs; the labor charges incurred in storing or packing, setting out in the spring or unpacking the colonies; the loss of dead or weak colonies during the winter; the cost of requeening queenless colonies or drone laying queens; the average spring strength of the living colonies and what percentage of the total will make good producing units; the cost of additional food required in spring; and finally the percentage of over-wintered colonies which may readily be divided, in spring, to replace winter loss or provide additional production units less the cost of the queens required for making the divisions.

Referring back to the table, in which practically all of the applicable factors noted above were included in the total cost calculations, it is readily apparent that the average cost per colony, over the twelve year period, for over-wintered colonies

TWELVE YEARS' FIGURES ON PROFITS PRODUCED FROM OUTSIDE-WINTERED COLONIES VERSUS PACKAGE BEES

	—Outside-Wintered Colonies—			—Package Bees—		
Year	Number of Colonies	Total Cost	Total Value of Production	Number of Packages	Total Cost	Total Value of Production
1925-26	21	124.15	536.38	24	167.69	289.19
1926-27	21	123.66	307.53	12	102.07	206.70
1927-28	22	153.82	624.20	12	86.93	181.87
1928-29	31	145.25	503.70	33	191.89	796.46
1929-30	31	141.69	621.42	14	91.61	169.90
1930-31	31	113.87	486.52	12	64.17	200.70
1931-32	31	101.86	306.12	6	31.12	54.60
1933-34	31	253.93	394.50	25	133.94	256.10
1934-35	11	65.50	128.50	20	87.53	183.72
1935-36	11	81.77	274.80	32	148.84	772.60
1936-37	11	60.84	165.15	32	130.77	335.35
1937-38	11	63.88	179.83	32	133.34	449.42
Total	263	1,430.22	4,528.65	254	1,369.90	3,896.61
Total Profit			3,098.43			2.526.71
Average Profit per Colony			11.78			9.95

XUM

was $5.44 as compared with $5.39 per package colony. This indicates that there is practically no monetary difference when all cost factors are taken into consideration and, furthermore, that the production value of the over-wintered greatly exceeds that of package bee colonies, to provide the greater profit per colony.

Cellar-wintering of bees requires a larger total initial expenditure of capital to start with but the average per colony cost is less than that for outside-wintered colonies, when spread over a long period of years.

The average total consumption of cellar-wintered colonies, over a nine year period amounted to 38½ pounds, from the time the colonies were fed in September until they were placed on their summer stands in the spring. This would leave an average of 16½ pounds per colony for the spring building-up period, and this was generally sufficient because very few over-wintered colonies required feeding in the spring. In fact, in the majority of the colonies there was ample honey to provide both the parent colony and the nucleus with sufficient stores until fresh nectar was available in the fields.

The average number of colonies which died in winter amounted to approximately 9½ per cent, while the average spring strength of the living colonies amounted to six frames, covered with bees, at the first spring examination. The average total consumption of colonies wintered outside in cases, over a five-year period, amounted to approximately 45 pounds per colony. The average number of colonies which died during the winter amounted to 12.7 per cent, while the average spring strength of living colonies amounted to 6⅔ frames, covered with bees, at the first examination.

The average total consumption of colonies wintered outside in balsam-wool amounted to approximately 40 pounds per colony. The average number of colonies which died during the winter amounted to 3.33 per cent, while the average spring strength of living colonies amounted to 9½ frames, covered with bees, at the first examination. When the spring strength of outside-wintered is compared with that of cellar-wintered colonies, the difference in average total consumption of stores is practically negligible, because outside-wintered colonies frequently start rearing brood during February or March and contain a relatively higher proportion of young bees than do cellar-wintered colonies.

The average spring strength of the colonies, together with the proportion of young bees or brood present, determines the value of colonies from a production standpoint. Weak over-wintered colonies, covering less than three frames with bees, may be considered useless, unless the colony is headed by a young mated queen. Such weak colonies may profitably be united with medium strength colonies. Very strong or strong colonies boiling over with bees in the spring, are a gladsome sight to the eyes of every beekeeper but they forebode trouble ahead; particularly from the swarming viewpoint, unless such strong colonies are divided in May or early June.

Small three-frame over-wintered nuclei headed by young queens frequently produce as much and more than a two-pound package colony. Experimental work carried on showed that strong colonies divided in May produced nearly twice the amount of honey produced by similar strength colonies left undivided and operated as checks. Therefore, it would be logical reasoning to assume that the majority of Manitoba beekeepers have missed an opportunity to increase their net income by not dividing their strong over-wintered colonies.

The loss of queens on introduction in package bees, over a six year period, amounted to 8.6 per cent on a total of 208 package colonies. The percentage of supersedure of queens in the same group amounted to 18.3 per cent. The loss of a queen on introduction in a package colony provides a serious setback to the building up of the colony strength and may materially reduce the yield of honey produced. Early supersedure of the queen has nearly the same effect as the loss of a queen on introduction. Therefore, practically one-fourth of the package bee colonies are subject to a serious reduction in their honey producing ability unless the beekeeper pays close attention to details and systematically examines his package colonies. Supersedure in over-wintered colonies, although not quite as frequent as in

package colonies, does take place. However, in an over-wintered colony supersedure generally takes place without any interruption in the brood-rearing cycle because the old queen continues her egg laying duties until the young mated queen is laying regularly, which process may take place without being observed by the average beekeeper.

There are certain conditions which may necessitate the killing of all the colonies in the fall; e.g., when an apiary is heavily infected with A. F. B., or when the honey crop gathered is not sufficient to over-winter the colonies and the price of sugar so high that it is financially not feasible to attempt to over-winter the bees, and there may be some other reasons, which do not come to mind just now, not mentioned here. However, beekeepers frequently use the above mentioned exceptions as an excuse to justify their incapabilities or lack of fore-thought. Several beekeepers who killed their colonies in the fall argued that by not over-wintering their colonies they could extract an additional average of 55 pounds of honey, per colony, market same, place the cash in the bank, clean up all of the equipment during the winter months, order their package bees in February and pay for same on receipt in April. This may actually work in practice with a small percentage of beekeepers but the majority lack the cash to pay for their package bees and the twenty pounds of sugar required per colony for spring feeding. Furthermore, although there is no definite experimental proof, it has been our observation over a period of years, that package bee colonies do not build up as well in spring when fed sugar syrup as when fed honey, particularly when there is a shortage of natural pollen available in the field or hives.

Neither time nor space will permit an extended elaboration of other factors concerned, therefore, for the sake of simplicity and to allow those who may be interested to draw their own conclusions, a number of the advantages and disadvantages for package bees and for over-wintered colonies are briefly summarized herewith:

PACKAGE BEES

Advantages.

1. Easier to manipulate for the beginner in beekeeping.
2. Allow for rapid expansion in size of apiary.
3. Rapid replacement of loss through wintering or disease.
4. Pollination, where honey production is not a primary consideration.
5. Rarely require swarm control.
6. Increase the total volume of honey produced.

Disadvantages.

1. Fluctuating purchase price.
2. Necessitates an outlay of ready cash.
3. Definite arrival dates for large or small quantities cannot be assured.
4. High percentage of supersedure among queens affecting total production capacity.
5. Require, on the average, 20 pounds of honey or sugar for spring feeding purposes.

OVER-WINTERED COLONIES

Advantages.

1. Increased strength in bees in early spring.
2. Strong colonies may be divided to compensate for loss in winter or to increase the size of the apiary.
3. No expenditure of ready cash incurred in spring.
4. Require less attention and labor during busy season in early spring.
5. Produce more honey, on the average, than package bees.
6. Provide stability to the industry.

Disadvantages.

1. Loss of colonies during winter averages 9½ per cent annually.
2. Labor costs slightly higher and spread out over a twelve months instead of six months period.
3. Swarm control measures must be adopted if dividing of strong colonies not practised.
4. Require more detailed attention during the harvest season.
5. Total investment in equipment considerably increased.
6. Damage to equipment may be considerable from dampness, flooding, etc.
7. Require more forethought and attention to detail for successful operation.

Wouldn't this honey fruit cake make a deluxe gift for that person who has "everything"?

To Eat and to Give

By Mrs. Benj. Nielsen

Good to the last tiny morsel are these flavorsome honey fruit cakes and steamed honey puddings—a delight to eat, a joy to give and so easy to make. A faithful ever-ready ally the whole year through, honey is doubly valuable in these fruity wholesome holiday treats. Fruit cakes made with honey will contain and retain that moist quality so desirable in good fruit cakes. The highly preservative property of honey permits the cakes to be made weeks ahead of time with absolute assurance of safe keeping and a decided improvement in flavor.

Now, of course, you won't be making your puddings just yet, but fruit cakes should be started ere long. Yes indeed! Honey fruit cakes get better the longer they stand. The long slow aging period permits the honey to blend thoroughly with the other ingredients to produce an inimitable goodness long to be remembered and surely repeated. At our house we still vote for the steam-bake method; tightly covered the fruity batter puffs and steams two to three hours in a hot water bath, followed by a finishing hour in a very slow oven, 275 degrees F., slightly cooler than for angel food cake. Then off with the covers for an over-night drying. If left in the containers this excess moisture may cause mold. Fruit cake treated thus has greater volume and more moist texture. If properly stored fruit cakes won't mold or dry out. They should be kept in a closely covered metal or glass container.

Often it's the glaze that gives that professional touch to holiday fruit cakes. Here's an easy, never-fail honey glaze sure to please both the eye and the taste. Boil together 1 cup granulated sugar, ⅓ cup honey and ⅔ cup water, until a soft ball forms when a portion is tested in cold water. Let cool, then quickly spread over the baked fruit cake. After five minutes decorate with fruits and nutmeats as desired.

When steaming puddings, always have the water boiling. It should come up to at least two inches from the top of the mold. Replenish with boiling water to prevent the pudding from falling. And if you do not have a steamer don't despair, your cold pack canner and some baking powder, or small coffee cans, will serve very nicely; and the wash boiler with wire cake racks on the bottom will serve in a pinch.

Honey Fruit Cake

One cup broken walnut meats, 1 cup slivered almonds, 1 pound raisins, 1 pound currants, 1 pound dates, seeded and chopped, 1 cup sliced honey candied orange peel, ¼ cup finely cut citron, ¼ cup finely sliced honey candied lemon peel, ¼ pound candied cherries, 6 cups sifted flour, 2 teaspoons soda, 2 teaspoons cinnamon, 1 teaspoon cloves, 2 teaspoons nutmeg, ½ teaspoon allspice, 3 eggs, 1 cup brown sugar, 1 cup honey, 1 cup melted butter, 1 cup any honey jelly (preferably a dark jelly, such as grape) melted, and 1 cup sour milk.

Combine nuts and fruits with sifted flour, soda, and spices. Blend beaten eggs and brown sugar with honey, butter, jelly, and sour milk. Stir the two mixtures together until thoroughly blended. Place batter in well-greased molds, filling only ⅔-full to allow for expansion in cooking. Cover tightly and steam for 2 hours. Bake in slow oven, 275 degrees F., 1 hour. Remove covers and allow to dry over night. The cakes may be decorated after the steaming and before the baking by arranging fruits and nuts dipped in egg white or honey over the tops. Makes about 10 pounds.

Deluxe Honey Fruit Cake

One-half pound candied cherries, ¼ pound orange peel, ¼ pound lemon peel, ½ pound dates, ¼ pound citron, ½ pound candied pineapple, ½ pound seeded raisins, ¼ pound pecan nutmeats, ¼ pound walnut meats, ¼ cup sifted flour, 1 cup butter, 1 cup honey, 5 eggs, well beaten, 1½ cups sifted flour, 1 teaspoon baking powder, 1 teaspoon salt, 1 teaspoon allspice, ½ teaspoon cloves, ½ teaspoon nutmeg, and ¼ cup grape juice.

Cut cherries in rings; finely slice fruit peels; cut dates, citron, and candied pineapple in fine slices; break nutmeats in halves. Dredge fruits in the ¼ cup flour. Cream butter with honey; add well beaten eggs and beat until smooth. Add remaining flour sifted with dry ingredients, alternately with grape juice, and beat thoroughly. Pour batter over dredged fruits, mixing well. Place batter in well greased molds, filling only ⅔-full. Steam 2 hours. Bake in slow oven, 275 degrees F., 1 hour. Makes 5 pounds.

Honey Date-Nut Pudding

One-half pound dates, cut fine, ¾ cup boiling water, 1 cup honey, 1½ cups sifted flour, 1 teaspoon baking powder, ½ teaspoon salt, 1 egg, 1 teaspoon butter, and ½ cup nutmeats.

Pour boiling water over dates, mix well, and add honey. Let mixture stand while sifting flour with baking powder and salt. Mix in the date honey sauce and add beaten egg, butter and nuts. Mix well and pour into well greased mold, filling ⅔-full. Cover tightly and steam 3 hours.

Topping

One-half pound dates, cut fine, ⅓ cup honey, ½ cup nutmeats, and ½ cup boiling water.

Combine ingredients and let stand for 30 minutes. Spread over pudding at the end of the steaming period. This topping keeps the pudding delightfully moist and imparts a grand flavor. Cover with waxed paper to store or keep in a tight cake tin.

Honey Carrot Pudding

Three eggs, 1 cup honey, 1 cup grated carrots (raw), 1¼ cups ground suet (do not pack in measuring) ¾ cup unsweetened pineapple juice, 3½ cups sifted flour, 1 teaspoon soda, 1½ teaspoons salt, ½ teaspoon cinnamon, ½ teaspoon allspice, ½ teaspoon cloves, 1 cup finely sliced citron, and ½ cup raisins.

Beat eggs very light, add honey gradually and continue beating. Add grated carrots and suet. Mix well. Sift dry ingredients together and add alternately with pineapple juice, reserving a little to flour fruits. Add dredged fruits and mix thoroughly. Pour into large, well-greased pudding mold, filling ⅔-full. Cover tightly and steam 4 hours. Store in crock or tight container in a cool place. Heat before serving. This amount will fill a two-quart mold.

Honey Prune Pudding

Two cups cooked prunes, 1 cup butter, 1¼ cups honey, 3 eggs, 1 cup broken walnut meats, 3 cups soft honey bread crumbs, 3½ cups sifted flour, ½ teaspoon salt, 1 teaspoon soda, 2 teaspoons cinnamon, 1 teaspoon allspice, and 1 teaspoon cloves.

Pit prunes and cut into small pieces. Cream butter, add honey gradually and beat until fluffy. Add well-beaten eggs and mix thoroughly. Stir in prunes, nutmeats and bread crumbs. Add flour sifted with salt, soda and spices. Mix thoroughly. Pour into well greased 2½ quart mold. Cover tightly and boil briskly for 4 hours. Serve with honey sauce.

Honey Cranberry Pudding

Two tablespoons shortening, ¾ cup honey, 1 slightly beaten egg, 2 cups sifted flour, 4 teaspoons baking powder, ½ teaspoon salt, ¾ cup milk, 1 cup chopped raw cranberries, ½ teaspoon grated orange rind, and 1 orange, peeled and cut in thin slices.

Cream shortening and honey. Add egg and beat well. Add the sifted dry ingredients alternately with milk, beating well after each addition. Stir in cranberries, rind, and orange slices. Fill well-greased mold ⅔-full, cover tightly and steam 2 hours. Serve hot with

Honey Sauce

Two egg yolks, ½ cup honey, 2 stiffly-beaten egg whites, 1 teaspoon vanilla, ⅛ teaspoon salt and 1 cup cream, whipped.

Beat egg yolks until thick and lemon colored. Beat honey in gradually. Add vanilla and salt. Fold in stiffly beaten egg white and whipped cream.

Aurora, Nebr.

To eat or to give, these doily frilled honey puddings have plenty of appetite appeal.

Honey for Health and Happiness

By William Smukler

Honey for beauty.

Over one hundred million dollars are spent annually for drug store nutrition. Yet one-third of our nation is under-nourished. With the present need for manpower, it becomes urgent that all are properly nourished. Some feel that to properly nourish our nation, which has departed so radically from natural food, is to feed the people fortified food. For example, a program is now being launched to enrich our bread by adding vitamin B, iron, and other elements.

But is this the whole answer? Let us first find out the reason why so many are undernourished. The average consumption of sugar in the United States is over one hundred and twenty pounds. One hundred and twenty pounds of sugar has a caloric value of 158,000 calories, enough calories for most persons for seventy-two days.

In a comparatively short time our stomach has had to adjust itself to this large quantity of sugar. As E. R. Root said, "We cannot change our digestive apparatus in a hundred years, which in the making took perhaps millions of years". It is evident that a number of serious ills must follow from this sudden unrational change from our natural sugar to cane sugar.

Sugar, except for caloric value, is of no benefit to the human body. Its great evil is that it takes the place of desirable and necessary foods which could supply our body with vitamins, minerals, and other essentials along with calories.

Sugar to release its only property, heat, requires six to eight hours; during this time it frequently depresses the appetite and leads to gas formation which is often accompanied by heartburn. Besides, in digestion it often ferments, causing an acid condition of the stomach. To neutralize this acid condition, the blood must supply calcium oxide and calcium carbonate. It is this attempt at neutralization which forces teeth to decay.

Honey, on the other hand, has been predigested by the bees and contains mainly two simple sugars, dextrose and levulose: sugars which are available to the body without further digestion. Dr. R. G. Floods states that honey's ease of absorption is due to the free available dextrose in the mixture and its laxative action to the levulose fraction, which is absorbed slowly so it eventually reaches the large intestine.

To manufacture one pound of levulose used to cost a hundred and thirty dollars, but a method devised at the Iowa State College has cut the cost to five dollars. Levulose may be eaten by some persons suffering from sugar diabetes. Honey contains nearly forty percent levulose, the cost of that levulose being almost negligible in comparison to the cost of manufacturing it. Honey is one of the safe sugars which can be used regularly by some diabetics.

According to the United States Bureau of Census, there has been a marked increase in the deaths from diabetes as consumption of sugar per capita increased. During the world war when sugar was scarce, diabetes almost disappeared.

Many doctors and institutions have seen the danger of cane sugar and

are making a noble effort to educate the public. Dr. John Maxwell, a renowned health authority, will not serve sugar in his health restaurant; instead, honey is placed on every table. Dr. Arthur Lorenz finds that honey will build up people sooner than any other food. The Fraunfelder Home for Children, the Honeybrook Sanitorium, and many other hospitals have based their cure on honey and found that it works. Even men like Kellogg of cereal fame have recognized the virtues of honey and have attempted to publicize them.

The truth of the old proverb that all remedies are in plants and all plants are in honey is becoming more evident. Dr. R. M. Liebstein found honey beneficial in the treatment of diseases of the pharynx, kidney, and bladder. He concludes, "Honey is a very concentrated and nutritious food article and easily digested and assimilated, and it is a good emollient, soothing, vitalizing and energizing agent, and has a good many therapeutic indications".

Dr. G. N. W. Thomas of Edinburgh, Scotland, found that in the treatment of heart disease and in severe cases of malnutrition with heart weakness, honey has a marked effect in reviving the heart action and in keeping the patient alive. His findings have been substantiated by a number of other doctors.

Honey has long been used in the treatment of coughs, colds, and whooping cough. Honey has "sunshine vitamin B" and so to safeguard against colds, it should be used liberally during the winter months.

Dr. Albert Thurlow said, "One dollar's worth of honey has more energy and less injury than any other food. A pound of honey is equivalent to five bananas, eight oranges, six ounces of cream cheese, ten eggs, twelve ounces of boneless codfish, or eight and one half ounces of walnuts in food value".

Honey can be had in eighty-seven different flavors; sugar has but one dull taste. Refined sugar is entirely devoid of vitamins, minerals, and proteins; honey has vitamins in most of its varieties and protein in all its varieties. In fact, the dark honeys contain enough calcium, iron, and manganese to increase the number of one's red corpuscles twenty percent. The protein content of honey will sustain a seriously ill person when he cannot take other foods. In addition, honey is an alkaline-forming food comparing favorably with some of the fruits and vegetables.

Besides all the above properties, honey is antiseptic. Micro-organisms carrying human disease cannot live in honey. Honey because of its strong affinity for water, draws the water out of the micro-organisms, thus destroying them.

Honey as a cosmetic has been recognized by a number of beauticians. For a lovely soft sparkling skin, apply a honey lotion. Honey can be massaged on the face after shaving by men to keep the face soft and clean.

Certain persons have hesitated about changing over to honey because they fear it is fattening. Honey is much sweeter than sugar, thus satisfying a person's appetite for sweets sooner than sugar. Besides, honey passes into the blood stream more rapidly than sugar. Because of the almost immediate digestion of honey, a person's hunger is satisfied quicker so that there is little danger of over-eating. In addition, honey is mildly laxative.

In concluding, I quote from the book "Science of Eating", by Alfred W. McCann, this passage: "The past curious indifference of the country towards honey has cost the American people more in dollars, public health and common comfort, than can be accurately estimated".

Ithaca, N. Y.

WHISKY QUIETS BEES

By I. Isaksen

I have discovered a new method of handling unusually mean and ugly bees without being stung. Mix an even amount of whisky and water, about one ounce, in a bottle with a sprinkler top and sprinkle solution over the brood chamber of the bees and close the hive for a few minutes. You will be amazed to see how meek and mild the bees become. They will cluster to the comb and stay there and the next day will work as freely as if nothing has happened.

Minneapolis, Minn.

[We never heard of whisky mixed with water to quiet bees. The trouble with some beekeepers might be that they would drink all of the whisky before using it on the hives. If they did, it might not make much difference whether or not the bees stung.—Editor.]

The Hoffman Frame

By Allen Latham

Probably the majority of beekeepers today know of no other frame than the Hoffman, for their experience does not go back in years to the time when the free-hanging frame was in common use and to when various ways were being devised to make a frame self-spacing. Some of the devices brought out were so intolerable that they were quickly dropped, though in some cases the ones to devise them continued to use them.

I myself used the free-hanging frame the first fifteen years that I kept bees and I will today state without any hesitation that I would prefer to go back to the free-hanging frame than to have to use the Hoffman frame. It was in the year 1901 that I first began to experiment with a self-spacing frame and at once decided that a frame with square-edged spacing was the proper thing, and in my case I carried the spacing the entire length of the end-bar as did Quinby and Danzenbaker.

I feel that it was and is a tremendous calamity to beekeepers that these two great advocates of the closed-end frame devised such miserable devices for the use of such frames. Quinby had a frame that stood up on its bottom, held by a hook at one corner to keep the frame from toppling over; a device that would suit the beekeeper with loads of time and plenty of cheap labor. Danzenbaker supported his frames by the middle by means of metal projections that hung on thin boards reaching about halfway up from the bottom, and closing the gap at the top with a strip of wood. This hive had a great run for a few years but for bee-glue reasons was soon discarded to save the souls of the beekeepers from perdition. I think I can say without any opposition that this frame arrangement was the most profanity-provocative that man ever devised.

I say that it is a pity that these two great beekeepers who had the right idea did not have the mechanical ingenuity to fashion a method of making use of that idea in a way that would be tolerable.

It is probable that these bad uses of the closed-end frames are responsible for the coming into general use of the Hoffman frame.

As is well-known this frame has a self-spacing feature in that the end-bars are 1⅜ inches wide from the top to slightly less than halfway to the bottom. An admirable feature to that extent, and would meet with my approbation had Hoffman stopped right there. He did not stop there. He, with others, reasoned that propolis would accumulate between the upper edges of these frames and so force them apart, and that bees would get killed by being crushed between these square-edged end-bars.

So, lying awake nights, Hoffman had what he thought was a miraculous vision though in fact it was a nightmare. He said to himself: I will make one of those edges V-shaped and then the frames can be shoved together without killing bees. More than that the sharp edge will easily go through the accumulated bee-glue and the spacing will remain correct.

What are the facts? Everyone who keeps bees where bee-glue is at all abundant knows well that the bees will plug more propolis into the spaces where those V-edges hit the square edges than they would if the two edges were square. Now even with the much-acclaimed factory hive there is always more or less inaccuracy, shrinking material, and warping. It follows then that when frames are put back after examination frequently the V-edge will not go back into the old crease, and if not put back into its original position or if placed in another colony various lumps of bee-glue will make it impossible to force the frames into position. Bee-glue does not remain soft but gets very hard in time.

Who does not know that unless he uses great care he cannot get ten-frames into a ten-frame hive after three years of use unless he removes bee-glue? Now when bee-glue is removed from a V-edge there are three full scrapes called for. When removed from a square edge only one scrape is called for.

Had Hoffman not had that nightmare we today would be using frames with all edges alike. Some will say that this would mean more bee-glue. I say that this is not so. Some will say it means more dead

bees. I again say that is not so. With the square edge a man can slide the frames in against each other while with bedaubed edges he cannot do it. With the square edge, if the frames are snugged against each other after each manipulation there will be almost no accumulation of bee-glue. I know this from 37 years of use of such frames.

If all frames had square edges then colonies bought or sold would fit in with other colonies. How is it now? You buy the hives of a defunct beekeeper and find that he has nailed his Hoffman frames with V-edge on the left instead of the right. You cannot use these frames with your own without having two V-edges adjoin. Then you buy up the hives of another beekeeper and you find that this beekeeper has nailed up all his frames with the two V-edges on the same side.

Now I will say that the manufacturer made it very plain when the Hoffman frame first came out that this matter of nailing was to be made clear. We were told to nail all frames so that when the end was looked at the V-edge would be on the right.

A beekeeper once came to me asking if I could furnish him with frames and foundation like sample. He had taken up the offer of a certain firm and had sent ten cents and received by mail a frame all nailed and filled with foundation. Now this frame was wrongly assembled. Think of it! A manufacturer sends out a frame wrongly nailed up! I looked into the catalog of that manufacturer and I found that of ten cuts showing frames eight were right and two wrong. The two wrong ones were unfortunately the very cuts designed to show the upper corner of a frame. I wrote to this manufacturer and called his attention to this matter and in his reply he stated that he was not aware that there was any right or any wrong way.

At a field-meet a few years ago I was asked to judge a frame-nailing contest. There were nine contestants and of those nine only two nailed up correctly the two frames each was required to nail. Some nailed up each frame haphazardly without getting the two the same, others nailed with both V-edges on the same side or with the V-edge to the left. I ruled out the seven though I was loath to rule out one. He did the best work by far. He finished first and did the best job in every way except that he put the V-edge to the left. He said that he did this because all his frames at home were like that. Now it happened that each contestant was to own the two frames with the foundation in them, but the first prize was 50 sheets of foundation. Had this gentleman overlooked the fact that the two frames would not match his at home he would have got the reward of 50 sheets of foundation instead of two frames with sheets in them.

In my defense of the closed-end frame I am well aware that unless the frames are held firmly together there will be an accumulation of bee-glue between the end-bars. To make this matter sure I long ago began to use only nine frames in a hive and against the last frame a follower was placed and against this follower at each end was placed a strong spring after the style of the super spring but about 8 inches long and much heavier. I had my springs made with the stipulation that each should have a pushing strength of 20 pounds when squeezed to half an inch. My springs are so strong that in several cases a weakened hive has been forced open by spring pressure. Not only does the follower have a full half bee-space but the wall on the other side of the hive has a full half bee-space. This is very essential with the 1⅜ spacing and desirable even with the 1½-inch spacing. If this is not done no brood will be reared in the outer surfaces of the outer combs.

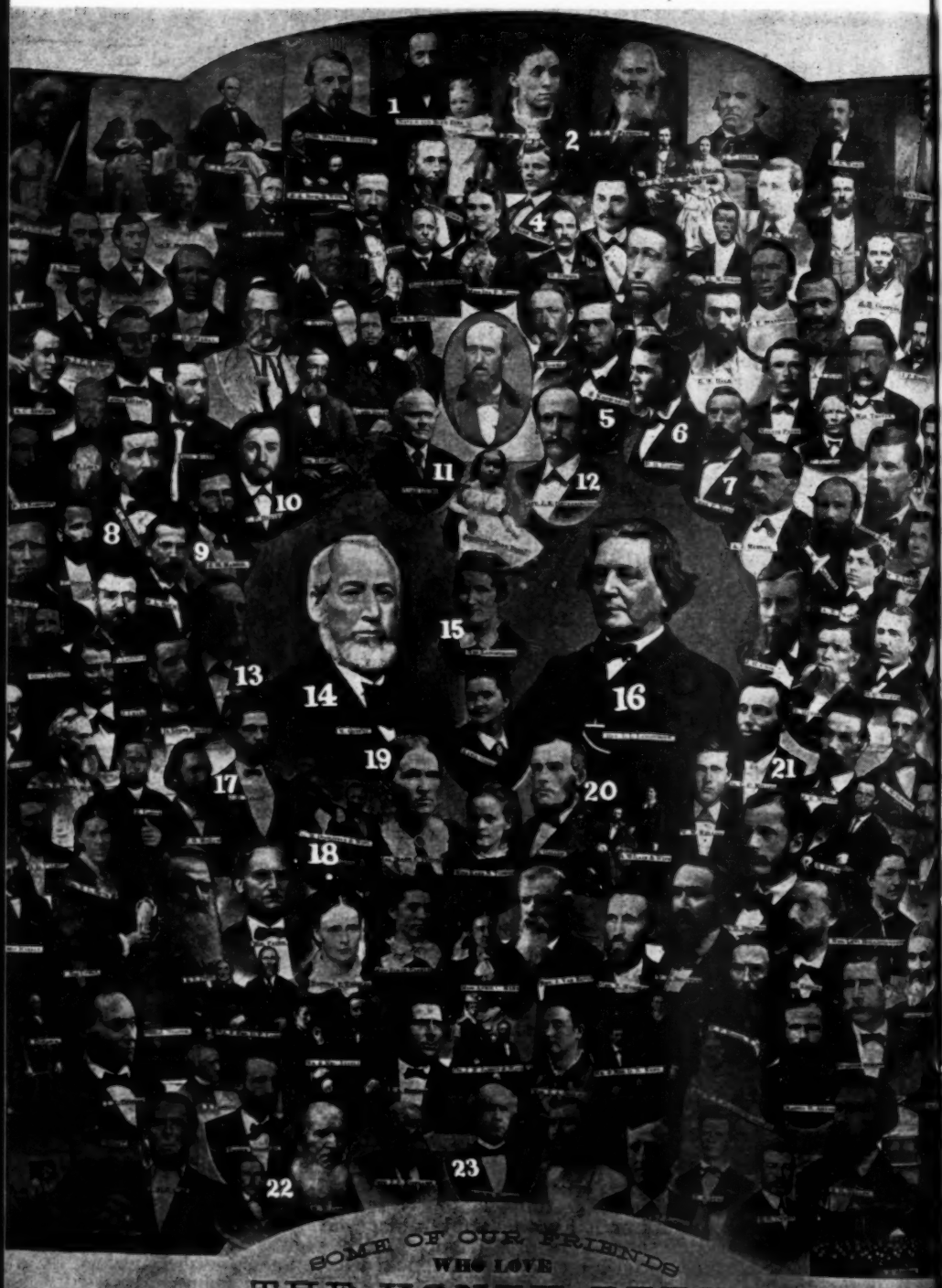
I feel very strongly on this matter of the Hoffman frame. I think that this frame instead of being a great boone to beekeepers is in reality one of the worst curses put upon our industry. I know that many will dispute me, and those who keep bees where little or no bee-glue is gathered are perfectly right in standing by the Hoffman frame. But I feel sure that every beekeeper who lives in a region where bee-glue is plentiful will concede that everything I have said is justifiable.

I happen to run about 70 hives with Hoffman frames. This came about when there was a big demand for nuclei and I was obliged to send out bees on Hoffman frames. Had I sent them out on my closed-end frames there would have been a comeback. I have been running these colonies with Hoffman frames about 20 years and I ought to know something about the matter. With my

(Continued on page 731)

XUM

An Old-Time Picture



SOME OF OUR FRIENDS
WHO LOVE
THE HONEY BEES.

For Key to this Medley, see "Gleanings in Bee Culture" for April, May and June.

PUBLISHED BY A. I. ROOT & CO., MEDINA, O.

The Pioneers in Beekeeping

By E. R. Root

Sixty-five years have passed away. The legend under the picture opposite written in 1875 does not tell the whole story of some of these veterans, most of whom, as was the custom in those days, wore beards, some with mustaches or sideburns. If they had received a Gillette razor or an electric shaving outfit for Christmas in 1875 they might have been insulted as a full beard was then a mark of distinction. To cut it off would be a sin. But sin or no sin, my wife made me cut mine off after we were married in 1885. How I ever got her with it on, has been a mystery to her and to me ever since.

How the world changes. It appears to be upside down. Beards have all disappeared and all we find is a narrow pencil line of a few black hairs on the upper lip. Bathing suits—Ouch! They are awful. I wonder if we should go back to whiskers and hoop skirts? No, the women wouldn't stand for either. There, I've gone far enough.

Who's Who in the 70's and 80's

Let me introduce you to some of the veterans of 1875. Let's start at Nos. 1 and 2 at the very top. Mr. and Mrs. A. I. Root with "Blue Eyes", or Mrs. A. L. Boyden, herself a grandmother now. Now jump over to the upper right-hand corner to No. 3, old Charlie Chapman. He hauled all of A. I. Root's freight and express to and from the depot, a half mile away in mud a hub deep in winter. It might take a hundred "Charlies" to do that now on sound hard pavements. Down below my mother, is Frank Benton in No. 4. In 1880 he, with D. A. Jones went to the Far East in quest of new races of bees. He brought back Cyprian, Palestinian, and Syrian queen bees—beautiful bees, but how cross! Just below him in No. 5 we have E. Kretchmer of the Kretchmer Mfg. Co., of Council Bluffs now owned by The A. I. Root Co. of Iowa. No. 6 is P. H. Elwood who introduced me to Julius Hoffman, the inventor of the Hoffman frame. At his right, No. 7, is Chas. F. Muth, the first real large buyer of honey in the early 70's and 80's, and who introduced honey to the bakers. He was succeeded by Fred W. Muth and his son, Clifford. In No. 8 at the left is Ed Blakeslee, who was one of A. I. Root's old chronies and who subsequently bought out A. I. Root's bee hive windmill. How A. I. Root made his first bee hives with the power from that mill is a story in itself. A. I. Root, in his series of articles now being reprinted in these columns, will tell how he at first made "misfits" and sawed his fingers, of how the old Langstroth evolved into the modern hive now on the market. No. 9 shows Rambler, or John H. Martin, a special correspondent for Gleanings, who traveled all over the country in the 80's and 90's, then into Cuba. Murray's cartoons showed him in all kinds of awful poses as he visited beekeepers. No. 10 shows C. P. Dadant before he became Editor of the American Bee Journal. He and his father, Charles Dadant, were champions of the large Quinby hive and opposed the craze for small divisible Heddon hives that filled the journals from 1885 to 1890. These two Dadants started the movement toward large colonies which are now in almost universal use in two-story, ten-frame Langstroth hives. The day of the small divisible hive is now a thing of the past. In No. 11 we have Adam Grim who made enough money from his bees so that he was able to start a bank—a feat that would hardly be possible with a 5c honey in localities often over-stocked. No. 12 presents Capt. J. E. Hetherington of Cherry Valley, New York, who at one time operated three thousand colonies in Quinby closed-end-frame hives. Most of his honey was in tall sections nearly 4x5 size. He, with P. H. Elwood, was almost the first to operate a series of outyards. European foulbrood wrought havoc with these two men before it was known how to treat by building up colonies. No. 13 shows L. C. Root, a son-in-law of Mr. Quinby. It was Root who revised and rewrote Quinby's "Mysteries of Beekeeping" and called it "Quinby's New Beekeeping". Mr. Quinby in Fig. 14 is the only pioneer who can be classed alongside of Langstroth, (No. 16) the inventor of the movable-frame hive. They were both a quarter of a century ahead of their time. (Be it noted Langstroth is the only one of his time who didn't wear whiskers). No. 15 is Mrs. L. L. Langstroth, the one who did such fine work in proofreading of her husband's first book "The Hive and the Honey Bee". J. H. Nellis (No. 17) was one of the early bee supply makers, a competitor of A. I. Root and G. B. Lewis. No. 18 shows G. M. Doolittle and wife. Mr. Doolittle was a close student of bee behavior. He was a prolific writer in his day and usually right. His book on queen rearing, "Scientific Queen Rearing", formed the basis of modern methods now used by queen breeders. No. 19 shows Mrs. Ellen S. Tupper, a writer in those early days in both the American Bee Journal and Gleanings. No. 20 presents E. Gallop, the one who introduced the square frame, 11¼x11¼ outside measure. G. M. Doolittle often quoted Mr. Gallop whose hive he used.

The man who wrote the most, and perhaps was quoted the most on bees in his day, was Dr. C. C. Miller shown in No. 21. Not an inventor he was a great teacher. His method of producing comb honey was adopted by Geo. Demuth. At the time of his death, Dr. E. F. Phillips, of Cornell University, recommended a bee library in his name which has now been established at the University of Wisconsin at Madison. No. 22 shows W. W. Cary of Coleraine, Mass., who made for Langstroth some of his first hives embodying the principle of the bee space of 5/16 of an inch. No. 23 presents the name of Samuel Wagner, the man who was the first editor of the American Bee Journal. He was a gentleman and a scholar whose conduct of the old A. B. J. was outstanding. He, with A. I. Root, had not a little to do with introducing the Langstroth hive and proving that Langstroth was the real inventor of the bee spaced hive with really movable frames. Lastly, next to Mr. Wagner on the right, is D. A. Jones of Canada, who financed the trip in quest of new races of bees in 1880. Jones was the fun-maker at bee conventions of his day.

The men and women here presented were the ones who made apicultural history in the 70's and 80's. Once in a while it is well to look backwards and see who blazed the way toward commercial beekeeping.

From the Field of Experience

WAR VETERANS TAKE UP BEEKEEPING

By Bradley Smollen

Several war veterans in the Civilian Conservation Corps unit at Camp Somis, Ventura County, Calif., have found bees the answer to their rehabilitation plan for that life that is supposed to begin at forty—or after forty.

They started with no capital at all, wintered 15 hives, and plan to expand to 100 during the coming season.

"We did it the hard way," says the veteran who heads the enterprise, (James DeBrule, foreground in the picture). "But every cent we make from honey is going into standard equipment. Our first hives, supers and even our extractor were home made, but I would never advise anyone to start beekeeping this way. The standard material is the product of generations of experiment, and its superiority over any make-shift is certainly apparent to us now."

This veteran thus answers the many requests for information he gets from other C.C.C. camps who have heard of the Ventura veterans' project. Many company commanders and educational advisers in junior camps have signified their intention to make bees part of the educational scheme of their companies. In the veterans' companies its value, of course, is much greater than in the boys' camps, because the service men have all attained the age where jobs in their own line are difficult to find. Where competent instruction is available, it is possible C.C.C. company commanders will allot some educational funds for supplies to start a class.

The veteran (DeBrule) who started the Camp Somis apiary learned something about bees in his native North Carolina. The camp lies in the foothills, ten miles back from the Pacific Ocean and alongside of it is an unusually large barranca, a deep cut river bed, dry except in the rainy season. Near camp the walls are fifty to sixty feet and sheer, without slope. In this dry soil, countless millions of swarming bees have tunnelled new homes. The veterans trapped their original bees in this area, in many cases finding huge stores of black honey.

The honey was extracted from excellent comb production in the first fifteen hives, ample left for winter carry-over, and the army officers, technical staff of the Soil Conservation Service attached to the camp, and their own comrades purchased all available.

Citrus and lima beans form the

Bees are playing an important part in the rehabilitation plan of these war veterans.

main crops of the neighborhood, but there is much white clover growing wild on the banks of the barrancas, also sumac.

No military organization would be complete without a guardhouse, the veterans reasoned, so one hive was set apart for a small, but particularly unruly swarm that they captured. The malefactors turned into law-abiding citizens and started to produce honey faster than some of the larger swarms.

Somis, Calif.

• • •

MILLER'S METHOD OF REQUEENING

By E. S. Miller

It is well known that in requeening by ordinary methods many queens are lost. If the weather is warm and the colony strong the queen will be liberated in a very short time, perhaps in an hour or two, and is almost sure to be killed. On the other hand, if the colony is weak and the weather cool, it may take several days for the bees to eat through the paper and during this time queen cells may develop. Whether the bees protect these cells from any attempt on the part of the queen to destroy them, I am unable to say, but I do know that where a virgin or queen cells are present, the queen is liable to disappear.

Other modes of introducing queens have been advocated, namely, smoking them in or daubing them with honey. No doubt these practices often succeed but many times they result in failure, a failure perhaps not discovered by a careless apiarist. The fellow who chucks in a cage as it comes from the mail or smokes or messes the queen in and then looks some time later to see if she is present, will very likely find a queen but not the one he introduced. Also, it often happens that a colony without brood or eggs may have a young queen not yet laying. The inexperienced beekeeper, deciding the colony is queenless, proceeds to requeen and apparently is successful. However, if the caged queen had been clipped he might later discover the new queen with a full complement of wings.

For several years we have used a somewhat different method and seldom is a queen lost. I remember introducing, a few years ago, some 60 or more without a single loss. This year about 35 full colonies were requeened without losing a queen. We do it this way: The cage is closed so the bees do not have access to the candy. The old queen is disposed of and the combs carefully checked for queen cells. The cage is then inserted between the combs, preferably near the brood or in contact with it. Three days later the brood combs are again carefully inspected and all queen cells destroyed, after which the bees are given access to the candy in order to liberate the queen. In about five days the combs are examined to make sure the queen is on duty.

The method, of course, involves extra labor and care, but I believe it pays. The loss of a queen may result in swarming and queenlessness, rendering the colony useless for the remainder of the season. Even if the bees rear a new queen it will be three weeks before she begins to lay. For the purpose of identification all queens should be clipped before caging for introduction. We do not attempt to requeen a colony of laying workers nor one in which all of the brood is emerged. Queenless colonies are united with queenright colonies by means of the newspaper plan, placing the queenless one on the top.

Valparaiso, Indiana.

• • •

HOW DID EGG GET ABOVE EXCLUDER?

By D. L. Woodward

Allen Latham asks in the September issue, "Will some one come forward who can truthfully say that he saw a bee steal an egg?"

If a bee transfers an egg in his own home I would not call that stealing. However, call it what you may, I never caught a bee transferring an egg. This past summer I found just one egg up in a shallow super. How did it get there unless a worker carried it up? There was an excluder between the hive body and supers above, and the queen was too large to have gotten through the excluder. I have kept from 100 to 400 colonies for the past 40 years and I have always found eggs transferred to some extent and supposed the workers did it.

Clarksville, N. Y.

[We are wondering if a laying worker may have deposited the egg in the cell above the queen excluder. Had you thought of this possibility? Some writers are now telling us that there are more laying workers in colonies than the average person suspects.—Editor.]

MORE MONEY FROM HONEY WITH FEWER HIVES

By Clarence Tontz

The above title is not intended to mislead the reader into believing that if he goes out and places Cyanogas into the entrance of part of his hives, the remaining ones will make him more money. However, some beekeepers actually show more profits from a single colony at the end of a season than other beekeepers with 20 hives.

It takes no prophet to know that many beekeepers during the winter months are planning increase and dreaming of their share of the profits which usually come with a national emergency or war.

Undoubtedly for the duration of the present emergency honey prices will advance. This kind of news isn't hard for any beekeeper to take. During the last World War when some honey sold for as high as 60 cents per pound, many beekeepers made a nice stake. Just as sure as the present emergency becomes more intense and food prices increase, overnight laymen are going to become small beekeepers, and backlot beekeepers will become commercial producers. Some of them, even if honey prices went up to a dollar a pound, would lose money.

Right here a word of advice to the beginner beekeeper: Reading a few good bee books and bee journals in a comfortable chair this winter will make you a lot more money than several weeks of sweating misguided labor in the apiary next summer.

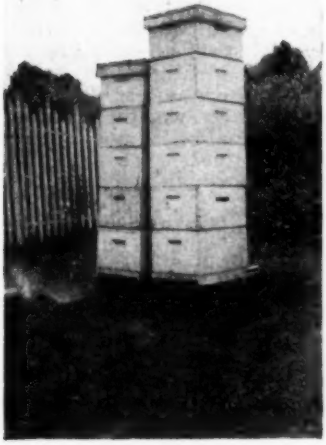
Now, more than ever, quality in bees is much better than quantity. Along with the advance in honey prices, production costs will also rise. What beekeeper wants to pay good wages to beemen to nurse along a string of poor-producing colonies?

Not long ago I think I ran across the champion non-honey-getter of Oklahoma. His case illustrates my point of the value of fewer good colonies over many poor ones. For a good many years he has maintained an apiary of around 35 hives. After the swarming season he usually has about 15 new colonies, and he cuts around 10 bee trees each summer. By fall he usually boasts of around 60 "swarms", and by taking the honey pretty close, he usually gets a 5-gallon lard can of sweets for his family. During the winter he usually loses half of his bees and the next spring immediately begins all over again.

A hive should be looked upon as a hotel. If it is well filled with occupants, it is going to pay a profit. But if there are only a few occupants, the owner loses money.

Beekeepers who watch their production costs the next few years should, providing fair crops are secured, obtain a nice profit.

Stillwater, Okla.



Left: Either one of these two rousing colonies averages more money per season for the owner than the entire apiary of 35 hives in the other picture.

Below: A champion non-honey-getting apiary.

SECOND GLANCES

C. M. Isaacson

The opening article for October shows plainly the value of developing a strain of bees for a particular purpose—honey gathering. "Breed from the best" still is as true as ever. And advocates of winter brood-rearing to obtain extra large spring colonies might take note of the table included (page 614). The colonies averaging **least** in spring bees produced the most honey; those with the highest early population were only fourth. It is not the spring colony that produces the honey.

Evidently the Canadian public has become accustomed to honey in its crystallized state (page 615). In my locality only a very few prefer it thus. Perhaps Mr. Wright "has something" in his statement that this may partly account for the larger per capita consumption up there.

The plan for continuous drying of cappings should be of considerable value for many extensive beekeepers. It seems practical and a labor saver. For most of us smaller fellows, though, it unfortunately cannot be used—we are lucky to have one extractor in shape—let alone a spare one (page 616).

Dr. Phillips gives us an interesting account of a fortunate discovery (page 620). I certainly agree with him that these books have just a little more than ordinary value because of their ownership by the Rev. Langstroth. One can not but help have reverence towards a pioneer in any field—and place extra worth on any article associated with them.

Hallowe'en is supposed to be rather a scary night, but I don't believe anyone need be afraid of Mrs. Nielsen's recipes—even one with such a name as "Voo-Doo Punch". It uses honey.

The Tri-State meeting must indeed have been a success, and Mr. Root's report on it is a complete one (page 625). His mention of Mr. Hambleton's caution against placing undue reliance on any AFB resistant strain of bees is well to take note of. And that Mr. Long, Ohio's most extensive apiarist, uses a form of the Demaree system for swarm control, with little or no loss of prime swarms, is certainly of interest. Many of us can report likewise. The suggestion for a reserve of queens in nuclei is a very good one—a queen in hand is many times the difference between a crop and a failure for a particular colony.

I am sure that Gleanings' readers will eagerly await each installment of A. I. Root's experiences so many years ago. The fact that they read so "real" is one of the main reasons for their value. Those who remember his "story of his own life" that appeared some fourteen or fifteen years ago will have an idea of what to expect from these "new" articles.

Judging by the diagram on page 633, a reasonable explanation for the drifting experienced by Mr. Ranum lies in the too regular spacing of his colonies. Such an apiary does look nice but has too much of a "sameness" for the bees. Irregular spacing and opposing hive entrance openings (if set in pairs) would do much to eliminate the trouble. In my own yard, I am seldom bothered by drifting.

Carbolic acid as a spray repellent is evidently becoming well tested with considerable success (page 637). That will be welcome news to beekeepers in orchard sections. To my mind, this is a much better use than in honey removal.

At the risk of running up against those with much more experience and knowledge, I will still venture to contradict the statement in the editorial on page 658, that outdoor wintered bees build up faster than the indoor ones after they are placed out. They do not, if the cellar bees are wintered properly. My own yard was wintered "fifty-fifty" the past year, and while both came through well, the cellar bees amazed me by the way they caught up and even went ahead of the outdoor colonies that supposedly had a head start.

In "Talks to Beekeepers" (page 655), mention is made of the drones in the supers after Demareeing, and consequent danger of plugged escapes. A help at avoiding this is to smoke each super somewhat while placed on the upturned metal cover, and jounce out a good portion of the bees (if your combs can stand it). It doesn't take as long as it sounds, and makes for faster escaping, with few drones left to cause trouble.

Read the appeal from the American Honey Institute on page 665. Then when your honey crop is sold, act on it. The statement is a true one —that the Institute is the beekeeper's best friend.

Middle River, Minnesota.

A. I. Root's Twice-Told Tale

The Romance of His Beginnings in Bee Culture

No. 2

I left off in my last article as I sat watching, just at daybreak, for the first bee to make its appearance, which it did as soon as it was light enough. But from the disturbance of the night before, or from the unusual surroundings, it seemed to think proper to make a few tours of inspection about its new abode before leaving for the fields.

It was soon followed by another, and then two, three, half a dozen, until we had quite a scene of activity; all hovering about with their heads turned toward the hive, to mark its location.

After having been called several times in vain to breakfast, I finally concluded that they would work just as well without being watched, which is saying more than we could safely say of many human beings.

I had, before this, manufactured a Langstroth frame-hive, and taken great pride in having it well made, just as he recommends in his book, and began to feel very anxious to see how much better they work in the improved hive than in the one they then occupied.

Mr. Langstroth's directions for transferring were rather brief for a beginner, but I had unbounded confidence in my skill with bees, after having read so much on the subject, and intended to transfer them as soon as they had got a little used to their location.

But in the afternoon they seemed so much at home, that I concluded that the thing might be managed almost without their knowing it. It is true it was a hot day, and Mr. L. cautions us about handling honeycombs in hot weather particularly, and my wife bid me remember my prevailing fault of doing everything in a hurry just when I happened to take a fancy for any particular subject. But I could not bear to think of my bees being any longer without the great conveniences of movable frame-hives, so transfer was the order of the day, or rather P. M.

I had provided a bee-hat, (a clumsy wire-cloth institution, before I had learned that a piece of millinet drawn round a common hat was much better,) gloves, &c. Commenced by blowing in a little smoke, and turned the hive bottom-up, removed the *sliding bottom-board*, placed on my empty box decoy-hive in place to catch returning bees, and felt considerably elated at my success, as they seemed perfectly thunderstruct, and of course perfectly docile. For a decoy-hive to catch returning bees I had used my new hive, thus, as I thought then, killing two birds with one stone, as I supposed they would go right in and at work. But is was so unlike their former home that they only flew around in dismay, and refused to even so much as look inside.

Well, Langstroth's work (that was prepared near by with a heavy chisel across it to hold it open) informed me that the next thing was to drive them into the box, which I did systematically, and removed the box and bees to a smooth board, so that they might not fly away as my first ones had done. I soon demonstrated fully that bees must have ventilation notwithstanding a correspondent (in your February number) theorizing to prove the contrary; and who that has had much to do with bees has not seen them smother.

Now, the next thing, according to the book, was to pry off one side of the hive with the stout chisel aforesaid. All right; but the hive was screwed together with very heavy screws that were so rusted in that the heaviest driver would do nothing more than to spoil their heads.

As a last resort the combs must be taken out at the bottom, and one side, where there had been a light of glass, which I removed; and in consequence, (as the combs were pretty full, it being August,) some of the combs did get a *leetle* bruised in removing, so much so in fact, that I called to my wife for a large pan, and poured the honey out of the hive into it; bees and all, as some of them remained in the hive. These were strained out and carried back to *lick each other off* as the books said they would, and I busied myself in tying combs—such as I could—into the frames, thinking at the same

(Continued on page 727)

Spinster

Jane Says

What nasty weather we are having! Rain, rain, and then more rain! Gardens and potato fields are under water. Step on the firmest ground, and the water sloshes up. We worry about potatoes rotting, about how we can ever get our roots harvested. All is blue ruin, according to the pessimists, and it is hard for farmers who depend altogether on their crops to be optimistic in such weather. There is an old adage, "All signs fail in dry weather", and this year we can change it to "wet weather". If we have a day of sunshine, it will surely rain before the next morning. If the moon and the stars shine in a cloudless sky, don't for one minute believe it presages fine weather. The weather man is just using modern, war-time propaganda, which is either lying or deceptive.

And where we believed our bees would store enough honey to keep them well fed all winter, nectar-filled blooms being so plentiful, now we very much doubt it. There promises to be a good big outlay for high-priced sugar to keep them from starving through the winter, if this rainy weather continues. Even now they must be making big inroads on their stored supplies, because they must have food. Fasting isn't for bees. Luckily we took off no dark honey, but just what condition the colonies are in, we do not know until Honey Boy inspects the hives, which must be the first few fine days. If bees are like humans,—well, I don't envy him the job. We are irritable enough just worrying over how much we can save to store. What would it be if we faced actual starvation!

There are still many belated calls for honey coming in, and we are sorry we cannot oblige these would-be customers. We can thank the neighbors and friends, merchants, too, for much free advertising. They used our honey, talked about its mildness and fine flavor, and others wanted to try if for themselves, while those buying it, wanted still more.

One of our merchants told us yesterday of a certain traveller's wish to obtain a quantity of this honey. He had stayed over-night at one of our local hotels, and had been served some of our honey for breakfast. He commented that it was the finest flavored he had ever tasted, and asked where they had obtained it. Then he put in a good big order, but alas! a belated one. Next year he promises to come earlier.

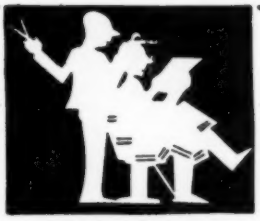
One thing we have learned, and it is this; There is a lot of satisfaction in offering something to the public that you know is good, and when honey is offered for sale, the wise beeman will be sure that it is all he advertises, or else never put it on the market.

The person who chuckles over his smartness in putting off some no-good article on an unsuspecting customer, will find he is not so smart after all. Boomerang-like, it rebounds, and he will be hurt the worst. He will lose that customer, be branded as an unscrupulous dealer, and when he again offers an article, however fine it may be, he will not be believed.

Feeding for Winter Pays Good Dividends

This morning the sun is shining, and we are hoping our bees may be able to fly. It makes it more dreary when they fail to come out, because there is a deal of comfort and even encouragement in their cheery hum. Honey Boy intends feeding those short of stores, and getting all packed and ready for winter, early, and before any severe cold comes. He weighs each hive, being doubly sure it has enough stores for winter. Next year's honey crop depends upon the way the bees come through the winter, and skimping in feeding will mean bees wintering poorly, and less fit for brood-rearing, colonies not in shape when honey harvest comes. Next year, too, if our colonies come through as we hope they may, there is to be a second yard started. A little nectar divided among many, isn't as good as a little nectar shared by a few. Hive returns will increase where not too many colonies are kept in one yard.—Spinster Jane.

Just News



There will be a meeting of the Iowa Beekeepers' Association in the Y. M. C. A. Auditorium, Ames, on November 13 and 14. The program is to be difinitely a producer program. The subjects will be presented by producers who are especially fitted through experience and results to appear before the group. There will be plenty of opportunity on the program for a discussion of the topic with the speakers and a general discussion of the hall sessions. A special feature will be made of exhibitor's tools which have been found helpful in apiary work.—F. B. Paddock, Extension Apiarist.

• • •

The following is taken from Sept., 1941, Canadian Bee Journal: "Karl B. Conger, manager of the Fruit and Vegetable Products Section, Special Products Board, Ottawa, has just sent a circular to all exporters advising that the Canadian High Commissioner states that 'the British Food Ministry is prepared to issue import licenses to take *all supplies* of Canadian honey available in 1941-42 season.' As such licenses are being issued the Special Products Board will not handle Canadian honey and exporters from this country must sell direct to importers in the British Isles. This means that all surplus Canadian honey can move off our market at $16.00 per cwt. and this information should be passed on to the press by each member as soon as possible as it will have a strengthening effect on domestic honey prices."

• • •

The Middlesex County Beekeepers' Assocciation will meet at 19 Everett St., Concord, Mass., on Saturday, November 29th at 7 P. M. Mrs. W. M. Copeland will be in charge of the Ladies Auxiliary supper of corned beef hash with honey baked beans honey brown bread, rolls, watermelon pickles, honey pumpkin pies and coffee. Mr. Benjamin R. Hildreth will speak and conduct an Information program, so bring your questions and problems and let us buzz about them.—A. M. Southwick, Pres.

• • •

"Seasonal Management of Commercial Apiaries" is a newly revised Bulletin, No. 228, by Russell H. Kelty of Michigan State College. It is profusely illustrated and covers most completely the various tricks of the trade known to the large honey producers, not only of Michigan but of other states. We have had many bulletins on bees for beginners but this is the first attempt to explain the production of honey in car lots. Mr. Kelty has had a very large and varied experience in the keeping of bees and in teaching the science of bee culture. He is a forceful and epigramatic speaker and a pungent writer. We are sure that every reader of Gleanings, whether beginner or carload producer, will find this bulletin of nearly a hundred pages good and profitable winter reading on bees. The bulletin may be secured by writing to The Bulletin Room, Michigan State College, East Lansing, Mich., for 10c each.

• • •

Mr. and Mrs. Fred W. Muth celebrated their Golden wedding anniversary on Sept. 13, last. Gleanings offers its congratulations and best wishes.

• • •

The Indiana State Beekeepers' Convention will convene in the House of Representatives, State House, Indianapolis, Nov. 15, 1941.

• • •

Mrs. Harriett M. Grace of The American Honey Institute, Madison, Wisc., is a very busy woman these days. Besides two broadcasts on honey that she is preparing, inquiries concerning honey and how to use it, are pouring in as never before. She could use more clerks in the office but present income will not permit it. Don't forget to send in your pledge and your dues.

• • •

The National Beekeepers' Auxiliary is trying to build its membership this year without cash prizes. This was decided upon in order that manufacturers and friends of the Auxiliary could send all money which they would give for such prizes to the Institute. Last year most of the larger Auxiliaries paid dues in August, September, and October. The prizes this year are fifty copies of "Old Favorite

(Continued on page 723)

Editorials

Actual starvation is more the cause of winter losses than cold. That was proven during the severe winter of '39 and '40. So make sure that your colonies have from fifty to sixty pounds of natural stores and all the pollen combs you can give them.

• • •

Upper Winter Entrances are easy to try out. If you are not using them try a few and see how the cluster of bees will hug up close to it. In very cold weather frost crystals will partly close it. When it warms up and the sun shines a winter flight is invited. Bees like fresh dry air.

• • •

Destruction of bees by arsenical dust is still going on in numerous states of the Union right now and the worst part of it is that farmers do not send out advance notice of such proposed dusting. (See the last Government Marketing Report.) Poisons blown in dust form, either from a plane or from the ground do vastly more damage than arsenicals in spray form. Unless all the bee journals and beekeepers wake up the wanton destruction of bee life will go on. Remedy—twenty percent of sulphur mixed with arsenical dust, it is claimed, will greatly mitigate, if not stop, the evil.

• • •

Package Bees vs. Over-Wintered Colonies The article bearing the above title, found on pages 686 and 689, this issue, is worthy of a careful reading. Scientifically conducted experiments covering a period of years require much work and painstaking effort. Time is required to establish truth in any field of endeavor. Ed Braun of the Dominion Experimental Farm, Brandon, Manitoba, and his associates are to be commended on the contribution they are making to our industry.

It must be remembered that Mr. Braun's experiments cover conditions that obtain in the far North and in the prairie country where the major honey flow begins relatively late in the season and is long-drawn-out. Beekeepers in other regions of the North, who are seeking the best method of solving the wintering problem, must be governed by conditions that prevail in their respective localities.

The American Honey Institute is making some more most valuable contacts with big food companies. The acceptance of the American Medical Association of "Old Favorite Honey Recipes" put out by the Institute is evidently having its effect. Here is just one example. General Foods Corporation has sent out a release recommending honey to approximately 316 radio stations scattered all over the country. Don't forget to send your dollars and dues to the Institute.

• • •

"Distress Lots of Honey" being sold below the market mean those lots the producer of which must sell at any price he can get, because he must have the cash then and there. It is here that the ideal cooperative can come to his rescue by giving him, we will say, two thirds price and later on, the market level less the cost of selling. As one will see by the Government Market Report elsewhere it is these "distress lots of honey" here and there that pull the price down on all honeys.

• • •

One Dollar a Pound for Honey A letter just received from a beekeeper in Scotland states that comb honey sections of clover honey are selling at 72c a pound and heather honey in comb at $1.00 per pound. The writer says the supply of honey is quite inadequate and the price far too high. It does seem as though one dollar is a lot to pay for a section of honey, but those who use honey regularly and want the best regardless of supply do not hesitate on account of price.

A one-half pound jar of honey was purchased recently in New York City for 59 cents. This honey was imported from one of the European countries. It is dark colored, thick bodied, with a strong flavor. In the opinion of the writer it does not begin to compare with the very excellent flavored goldenrod honey that has been secured this fall in many localities of this country where goldenrod is plentiful.

What would happen if some one would put this delicious golden-colored goldenrod honey into attractive half pound glass or earthen jars, ar-

tistically labelled, with perhaps some baby ribbon around the necks of the containers and place them on the New York market to retail for 59c? It would be an interesting experiment.

With all due respect to imported honeys found "dolled up" in fancy packages in the high-class stores, it can be safely said that the honeys of this country are equal in every respect to honeys produced in other countries.

The trouble in this country is that beekeepers haven't yet learned how to market their product. They may learn eventually.

• • •

Beeswax—In Demand Beeswax, having reached about the highest price recorded in the first World War, now demands the earnest attention of all producers. This is especially true since wax has advanced so much more rapidly than honey. In the average extracted honey business, the wax from the cappings amounts to about 2 pounds per 100 pounds of honey extracted. Occasional combs not fit for further use, burr combs, etc., when melted, bring the total to perhaps 3 pounds per 100 pounds of honey extracted.

Not much more than a year ago the value of the beeswax compared to the value of the honey was as 1 to 6 or 7. At present prices the ratio stands nearer 1 to 5. In other words, the value of the beeswax crop may amount to 20% of the honey crop instead of perhaps only 15% so short a time ago.

While these ratios are only approximate and dependent on many factors, yet that there is a change, no one doubts, and therefore it behooves all producers to make some effort to increase the production of wax.

Small bits of burr comb carefully collected by scraping the under sides of covers and top-bars of frames add up quickly if regularly rendered in even an inexpensive sun extractor. No beekeeper should be without one of these for while they are not to be recommended for old combs, they pay for themselves many times in the saving of the every-day accumulation of scrapings.

Combs that are crooked and that contain a lot of drone cells are worth more rendered into beeswax than for further use as combs. The winter is an excellent time to sort over supers and render the bad combs.

Attention should also be paid to the storage of the good combs. They are usually safe if stored where the temperature goes below freezing. If this is impossible it pays to fumigate with Cyanogas (be careful) or carbon-bisulphide.

Depending on circumstances, wide spacing of extracting combs is to be recommended,—9 or even 8 in a 10-frame super. In most instances if the full 10 combs have been used, the culled-out combs for rendering need not be replaced if wide spacing is practiced. Bulged combs are more easily uncapped and they yield more wax with no loss of honey.

Do not forget that copper or even iron kettles, used in heating, discolor wax. The less heat applied to beeswax in contact with any metal, the better. Always heat with water, and for the sake of preserving the natural color of the wax use soft water if possible. If hard water must be used, acidulate it with vinegar to prevent partial saponification and consequent loss.

Contrary to popular belief, comb foundation manufacturers are by no means the largest users of beeswax. It is probable that makers of cosmetics use more. While it does no good to say it, one wonders if defense projects might not go on just as fast if stearic acid could replace some of the carloads of beeswax that go into lip-sticks!

• • •

The Private Buyers Versus the Cooperatives This question is rapidly coming to the front. That some "co-ops" have been successful and some have failed, can not be denied. That some co-ops have made serious mistakes and some private buyers can see only one side (the selfish side) is equally true. Gleanings has been severely criticised for publishing the story of a successful cooperative, the Ontario Honey Producers' Company, Ltd., in our April and May issues for last year. This cooperative has had its ups and downs and now it seems to be working successfully. During the seventeen years of its history it has graded, processed, and sold seventy million pounds of honey—the largest year eight million and the shortest, two million.

Other cooperatives are springing up. Some may possibly fail and others will succeed. Success or failure is due largely, of course, to the personnel back of them but more than all else, to business methods and a business head to direct their affairs.

The basic principles of cooperatives when fair business methods are used are alike beneficial to the public and to the producer. In a rising market a cooperative can make a down cash payment below the market and later on pay the balance, less cost of the price at which the commodity (honey) is finally sold. For example, a co-op can pay 4c and then later on a rising market pay, say, 2c more less cost of handling the honey. On a declining market too large an initial advance may wreck the co-op and ruin the producer. We have been informed that is what happened to the California Honey Exchange. It advanced 8 cents on an 18-cent market for honey. The crash came and the price of honey dropped. The exchange had borrowed from the banks and could not pay back because it had paid the beekeeper and the latter had to pay back to the bank the money advanced.

The important advantage offered by the cooperative is that the producer secures a nominal payment for his crop in the fall which helps to tide him over until final payment for the crop is secured later on. This arrangement helps to prevent "distress" lots of honey being dumped on the market early in the season. Such lots sold at ridiculously low prices tend to ruin the honey market.

• • •

Selling Honey at Cost to Put a Competitor Out of Business

To shut out competition by retailing honey at or near cost, is getting to be notoriously too common on the part of both the roadside honey seller and the big packer. Both sides can and do play at that game with the result that prices are demoralized just at a time when the carload market on honey is beginning to climb. Too often one big packer will blame the other for starting to cut, but the war to ruin the competitor ruins the honey market instead.

One big packer announced publicly not long ago at a national convention of beekeepers, "We will not be undersold". This is tantamount to saying we will cut under. In some cases the cooperatives have been as big sinners as the private packers —both seeking to stifle competition, a practice that is as reprehensible as it is unbusinesslike.

Packers of both classes have gotten together and have promised to "be good" and sell at a fair living price; but soon one sheep will jump the fence and all the rest will follow.

At two recent Michigan conventions one speaker in no less a person than Russell H. Kelty, of Michigan, got up and said it was time to talk plain and say a spade was a spade. He gave publicly the names of the worst offenders, and some big producers were present.

It was apparent that the persons named will have difficulty in buying honey at any price especially in a rising market with packers or buyers who are not price-cutters because in all probability the names of the offenders will be passed around in the trade.

The suggestion was made: Why not publish the names of all the price-cutters in all the bee journals so that honest producers and fair price packers can join in a boycott of the offenders. The boycott is a two-edged sword and of doubtful procedure. It might aggravate and foster an admitted evil rather than correct it.

• • •

What We Don't Know About Wintering

In our last issue, page 658, we endeavored to point out some things not settled on the subject of wintering. For example, on the problem of winter brood-rearing and pollen, particularly in the months of January and February, authorities are not agreed. The U. S. Bee Culture Laboratory at Madison, Wisc., argues that a little of it is normal and necessary. Dr. Phillips and some others apparently disagree.

Small upper entrances, five-eighths to one inch in size, near or in the hand hold of the top story to prevent suffocation and to let off excess moisture, is another good or bad thing on which there is a diversity of opinion. Packing, can it be overdone or left off entirely in some localities is another debatable question. Locality, with high or low temperatures, do they modify practice?

(Continued on page 722)

From North, East, West and South

NORTHERN CALIFORNIA, Oct. 4.

Weather: The stranger visiting the Bay Region any time of the year might conclude that we have perpetual sunshine. Another time when the heat of the Valley is meeting the cool currents of air from the Pacific, causing the fogs we sometimes have, he might come to a very different conclusion. The weather in the Bay Region is no criterion for the weather of the entire northern California.

We receved a letter the past week from a beekeeper in the valley complaining of the effect on his bees caused by a long dry summer and in the same mail another came from a man not fifty miles from the former saying they had had their first fall of snow. Bees in California are affected by weather as they are in other states.

Condition of Bees: They are in better condition than usual at this time of year. More beekeepers each year are careful about requeening and judging from reports, fully 75 per cent have already been requeened and have plenty of young bees. Plants are about normal. Some blossoms are still giving pollen.

Honey Crop: The reports of the honey crop are mystifying and vary from no crop to a record-breaking crop. It is indeed difficult to account for the great difference in reports. Extraction is pretty well over. There is some honey still coming in from star thistle, alfalfa, spikeweed, blue curl, and rabbit brush. Eucalyptus is about ready to commence blooming. The season's crop is well in the can and beekeepers generally are looking forward to the new year.

Honey Market: There is not an active market for honey. The price offered by buyers is not attractive to big producers. Some small lots have been sold. It is the small offerings that demoralize the market. Sometime we may find a remedy.

Beeswax is scarce and in good demand. The price seems to go up daily. There is a great amount of wax wasted every year by beekeepers and already there is a marked improvement toward saving. This is encouraging.

Miscellaneous: This month it is entirely proper to report an earthquake, for we had one that was felt along the entire coast from Canada to Mexico. Very little damage was reported. The most damaging report we have for September is that caused by several severe grass fires. The one the past week did the most damage, burning over several thousands of acres. Ranch houses and buildings in the course of the fire went up in the flames and several thousand cattle were burned. To date 3000 colonies of bees have been reported burned. One beekeeper reports that he had just finished requeening his yard. The buildings on his ranch were all burned.

The report has reached the office of the State Association that the showing of honey at the State Fair was far above the average and that the interest in the use of honey is greatly improved.

The Convention of the California State Beekeepers' Association is announced for December 3, 4, and 5, at Stockton with headquarters at the Hotel Stockton.—Cary W. Hartman, Oakland, Calif.

• • •

SOUTHERN CALIFORNIA, Oct. 3.

Weather: Southern California is basking in sunshine with no prospects of any rain in sight. Nights are just a little cooler and the days not quite so warm but otherwise the bees could just as well be working if there was any bloom for them to work on.

Honey Crop: We have nothing new to report on the honey crop. While a few favored localities gave phenomenal yields, by far the greater territory seems to have been only fair and report nothing to get excited about.

Market: The market conditions have not changed materially since our last letter. Honey while a little better than one year ago has not advanced as we had hoped it might.

Beeswax is very much in demand at 35 and 36 cents. The price of wax went to nearly fifty cents during the last war. Will it reach that figure again? Who knows? With buyers anxious to get wax at prices 15 cents or more above prices of one year ago and honey prices above those at this time last year the beekeepers' outlook is brighter.

Miscellaneous: In talking with beekeepers located in different parts of Southern California it is interesting to listen to their reports. One beekeeper who is extensively engaged in the business placed an apiary in a locality near the coast and where the crop from sage is very uncertain. This season the weather proved several degrees warmer than farther inland, consequently he secured 400 pounds per colony. We heard of some apiaries farther inland that gave no surplus. Localities certainly differ greatly in yield this season. Sometimes a difference of only a few miles spelled the difference between a good and a very mediocre yield.

With all of this agitation about restrictions on claiming "Health Properties" in honey advertising, a thought comes to the writer that he thinks would be of far-reaching benefit to the honey producer. How many times is honey mentioned in the Bible? Use real quotations, book, chapter, and verse. Who could say no? Will it be read and go over? Only a fair trial will tell, and our guess is that it is well worth trying.

In our last letter we mentioned the absence of destructive fires on our bee ranges this season. Perhaps we should have said, our best bee ranges. We find that one fire, about twelve miles from here burned over about two thousand acres. While this is not considered among our best bee territory nevertheless there is some loss to the honey industry. Since starting these notes several reports have appeared in the papers telling of forest fires in Southern California. Most of these conflagrations have been on the higher mountains where much of the growth is large timber with little that can be called good bee pasture. Some high drying winds have occurred over our part of the country during the past few days. These winds which usually come at irregular intervals during the fall and winter months are more or less disagreeable at the time but cause no particular loss to the beekeeper as they come at a season when the honey crop has been harvested. The season is near at hand when we might expect rain most any day. We feel safe in saying that the ground carries more moisture left over from last winter's rainfall than any year in our memory since we came to the state over forty years ago. This is certainly a good foundation for the 1942 season.

Convention time is here again and the writer for one sincerely hopes that the mention of disease and the discussion of foulbrood will be taboo at all of our public gatherings. Just give a little thought to the far-reaching effects should any other article of food be discussed in connection with disease in the way foulbrood is sometimes talked of in our meetings. —L. L. Andrews, Corona, Calif.

• • •

TEXAS, October 1.

The weather for September was above normal for bees in this section of Texas and from what can be learned these conditions prevailed all over the State. Rains, in some places torrential, brought many plants into bloom and small honey flows have occurred.

Conditions: A surplus stored has added considerable to the winter stores. Fall brood-rearing at the end of the month is well along and from every indication the brood and field force are well above the average. Beekeepers should note that cold weather and cold rains will shortly occur. It will be well in order to protect the still abundant brood to reduce the entrances to all hives about one-half by the fifteenth of November and then by Christmas time to reduce them to a five-bee-space opening. The small opening seems to be necessary in order to protect the bees from mice and other small depredators. It also enables the bees to keep up the inside temperature more easily. Due to heavy fall rains occurring over most of the State, it is most probable that there will be good honey flows early next spring. It is evident that there will be a demand for honey and at somewhat increased prices.

Beeswax: From inquiries coming to beekeepers, beeswax is in greater demand than since 1918. Beekeepers should not be tempted by these high

prices to sell the wax which they will need next spring for their foundation as the price of foundation must go upward with the price of wax.

Miscellaneous: During the last half of the month the writer has visited a large portion of Texas, especially that occupied by migratory beekeepers during the winter. From contact with many beekeepers operating both in Texas and northwest it seems that now is the time to commence preparing for the heavy demand that will be made next spring for package bees, queens, beekeeping equipment, and honey containers. There is every indication that the season of 1941 will be much better than normal for beekeepers in the State of Texas.—H. B. Parks, San Antonio, Texas.

• • •

NEBRASKA, October 4.

Weather: The season was a barren one to begin with. Many fruit trees were killed in the sudden freeze of last November and because of cloudy and cool weather bees were unable to take advantage of the little bloom available. For the first time in many years, we were unable to find yellow sweet clover fields, so nectar gathering awaited the bloom of white sweet clover. This condition apparently will be changed next year; good rainfall received this year should result in copious early bee pasture. Rainfall was a little above normal except in early August when a hot dry period, plus grasshoppers cut short the flow from sweet clover. Late August brought ample rain; seven inches in 24 hours in numerous localities brought about flood conditions. Light frost visited western Nebraska early in September. So far no killing frost is reported; sweet clover has started to bloom again.

Crop: Good to excellent crops of fine quality honey are reported by those who had bees in condition to take advantage of nectar when the flow did start.

Colony Conditions: Bees are in excellent condition. It has been many years since the writer has seen such a profusion of smartweed bloom; the bees have made the most of it. Flow from aster reported good in some localities.

Market: Demand is slow. Prices practically the same as last year except for a stiffening of price in some chain stores which always undersell.

Beeswax: Demand is brisk with prices unusually good, due, no doubt, to difficulties in importation of wax.

Miscellaneous: It appears that the grasshoppers are "here to stay". While surveys show slightly lighter adult population of grasshoppers in some parts of the state than one year ago, the infestation moved to a concentrated point in the central and south central parts of the state.

More beekeepers exhibited at State Fair than for many years past. Their fine exhibits attracted much interest. We were particularly pleased and impressed with the number of fine-looking entries in the honey cookery section, which is a department entirely apart from the main cookery division of the Fair.—Benj. Nielsen, Aurora, Nebr.

• • •

BRITISH COLUMBIA, October 3.

Weather: Our local newspaper today carries the headline "Thirty days hath September and on twenty-two of them it rained".

Even that is not the whole story as rain started on August 20th and is still coming. Quite a loss is being faced by growers of such crops as tomatoes and onions, in which this valley specializes, but grain and hay crops throughout the province have also suffered severely.

Hills in this dry belt that are usually burnt brown at this season are carpeted with rich green, and clover stands are well started for next spring.

Conditions: Yet the honey crop is short due to a shortage of moisture earlier in the summer. Reserves of moisture were low last spring but early rains carried the crops along and early flows were exceptionally good with us.

Intense heat at the end of July seemed to take the last reserve of moisture from the soil and for the first time in years, second crop alfalfa yielded practically no nectar. Even sweet clover ripened out completely and gave no late flow. The rain came too late to help us and the weather has since remained cool.

One result was early cessation of brood raising and in fifty percent of the colonies checked September 20 to 30 not even capped brood was to be found. However, colonies were

well up in strength. Brood-nest stores are light and a good supply of food chambers well filled during the early flow are now a very satisfying possession. Crop yields will probably amount to less than 1940 which in itself was a short crop.

Market: Early demand has been very brisk due to the fact that stocks of local honey were exhausted.

The Canadian Pacific Exhibition at Vancouver, August 25 to Sept. 1, brought out a very creditable display of honey. Chief honors came to Okanagan Valley honey including the gold medal for the best honey in the show, and F. Bettschen, of Vernon, winner.

Miscellaneous: Bear trouble is the order of the day in one of our own apiaries and Bruin has been a persistent visitor each night for the past week and so far has side-stepped a trap set for him by the local game warden. We have at least proven, to our own surprise, that bears do really like honey for with brood totally absent, a well-filled shallow super seems to be his favorite dish.—G. F. Pearcey, Kelowna, B. C.

• • •

MICHIGAN, October 7.

Weather: A wide range of weather conditions afflicted Michigan the major part of the summer. With the exception of Southeastern Michigan, which received a normal amount of rainfall, drouth and cool weather cut the crop far below normal. In the heavy honey producing area of the Thumb, less than two-thirds of a normal crop was taken, in some places only one-third.

Fall rains were the first rains seen in some sections since the fall of 1940.

Crop and Market: Although the honey buyers inform us of the biggest crop on record, strangely enough, Michigan honey producers are sitting tight and waiting for a firmer market. The slight increase in price to date scarcely takes up the slack in our inflation dollar.

Miscellaneous: As a result of discussion at two Michigan beekeepers' meetings held in Saginaw and Bellaire, September 18 and 19, the following Industry Committee has been appointed by Commissioner of Agriculture Leo V. Card:

Representing M. B. A.—Members: Floyd Markham, Ypsilanti, Oscar Schmidt, Bay City; Alternates: L. S. Griggs, Flint, Russell Thayer, Freeland.

Representing Supply dealers—Members: A. B. C. Woodman, Grand Rapids, E. M. Hunt, Lansing; Alternates: A. G. Woodman, Grand Rapids, Howard Schmidt, Bay City.

Representing Honey packers—Members: L. M. Hubbard, Onsted, M. L. Vedder, Litchfield; Alternates: Floyd Allen, Onsted, Clyde Godfrey, Jonesville.

Representing Independent beekeeper—Member: Frank Slusher, Traverse City; Alternate: Floyd Hatch, Copemish.

Representing Michigan State College Extension—Member: R. H. Kelty, East Lansing; Alternate: A. B. Love, East Lansing.

Representing State Department of Agriculture—Member: D. P. Barrett, Howell; Alternate: Miles Nelson, Lansing.

Representing Commercial honey producer—Member: Howard Potter, Ithaca; Alternate: Victor Harris, St. Louis.

The following resolution was adopted:

RESOLUTION

WHEREAS the 1941 crop of honey produced in the State of Michigan is estimated at eight million pounds which is approximately thirty per cent below the production figures as shown by the State Department of Agriculture from their registration records of 1940 and,

WHEREAS there seems to be no relief in sight from the present prevailing low prices and,

WHEREAS with labor and material costs on the increase which places the cost of production in excess of the prevailing honey prices now,

THEREFORE be it and it is hereby resolved that we the industry committee representing the beekeeping industry of the State of Michigan very urgently request that an investigation of these deplorable conditions be immediately made to determine just what aid can be offered.

This resolution was adopted by the unanimous vote of the industry committee at their meeting held September 29, 1941. D. P. Barrett
Chairman
A. B. C. Woodman
Secretary

—R. H. Kelty, East Lansing, Mich.

NEW YORK, October 4.

Weather: This region is experiencing a prolonged drouth which is becoming extremely serious. Last month the rainfall was exceedingly light, the driest September recorded by the local weather bureau. Precipitation deficiencies for the year range from two to ten inches over the state.

Crop: The clover crop for New York as a whole is said not to be exceedingly large although some areas, including this one, experienced the best crop in years. The quality is exceptionally good—excellent color (water white honey was produced where the color is often extra light amber up to medium white), and running around a water content of 17%. The buckwheat crop has been less than average, about the same as 1940 and is this large only because it was augmented by goldenrod and aster.

Market: Carlot prices have advanced slightly over last year but are still ruinously low for high quality clover honey. Beekeepers not needing immediate capital are content to wait for a more settled market before shipping. The establishment recently of a bonded warehouse for cooperative members will eventually serve to prevent many distress sales in the state by advances of up to three-fourths the value of the honey on delivery to the warehouse, thus keeping that honey from establishing an exceedingly low market price. Buckwheat honey has advanced in price over last year due to an organized marketing effort, although many uninformed beekeepers sold early at extremely low figures. No difficulty is expected in disposing of the remainder of the crop at a fair price before 1942 crop is available.

Miscellaneous: The outlook for a clover crop next season is none too good. Heavy soaking rains are needed to save what plants have not already been destroyed by drouth. Colonies are in good condition with lots of young bees as a result of warm weather and a nectar flow which caused much brood to be reared later than usual. During the middle of September many colonies had brood in six to eight combs. Food chambers are very heavy and no shortages should occur in stores for the winter period. One beekeeper nearby has completed packing 1000 colonies, something of a speed record we imagine for this early in October. William L. Coggshall, Ithaca, N. Y.

• • •

PENNSYLVANIA, October 5.

Crop: This has been a satisfactory season for the beekeepers of Pennsylvania. The honey has been of fine quality, the flow has been good and the markets are improving. Every major source of nectar provided a fair surplus. The fruit trees did fairly well as did clover and basswood. The buckwheat flow was spotted with some sections reporting a large surplus. I have seen some buckwheat comb honey from Eastern Pennsylvania that would grade fancy without any trouble. The fall flow has also been above normal with the bees still working hard on white aster in Southern Pennsylvania.

The flavor of this late honey is not too good but it fills empty hive bodies where extensive feeding would have to be done were it not for this flower.

Large quantities of honey are moving into the market and beekeepers report sales greater than for any of the last ten years. Comb honey sales have shown an increase for the first time in several years. One beekeeper reports that his crop of 18,000 sections has already been sold.

Prices: Price changes are rather spotted with most of the progressive beekeepers reporting small increases over last year's prices. Reports still come in, however, that some chain stores are retailing 5-pound glass jars as low as 47 cents.

Miscellaneous: Our State Picnic and Field Day was postponed until October 4 because of the prevalence of paralysis in South Central Pennsylvania. The postponement reduced the attendance greatly; however, over 100 beekeepers were present on the 4th to listen to interesting discussions by our State Secretary of Agriculture, the Honorable John H. Light, and James I. Hambleton of the Government Bee Culture Laboratory. Mr. Light told about the progress of apiary inspection in the

State. He reported that over 54,000 colonies were inspected during the past season.

Our first 4-H bee club round-up for the year was held in Venango County. The nine members of this club averaged 117.5 pounds of honey per colony. Their record books showed a profit of $13.68 per colony or a total profit for the club of $177.84. Most of the colonies were package bees received in early May. —Edwin J. Anderson, State College, Pa.

• • •

GEORGIA, October 2.

Weather: We have had a beautiful late summer and fall, and all that we could expect for honey gathering and secretion. Owing to bad weather in the spring the crop was cut short. Too much cold and rain for bees to get into normal condition. The earliest honey plants were badly nipped by frost, consequently the spring crop was about fifty percent of being normal.

Crop: In the southern part of the state where some of the main sources bloom in very early spring, nectar was so scarce during the time of bloom that thousands of colonies perished, even the best got into a very weak condition. Tupelo-gum and gallberry bloomed almost together, and these two sources combined gave us a surplus of about 40 pounds. Some few beekeepers who happened to have plenty of honey on reserve did better.

The spring cycle of bad weather lasted on up through the state. The great Piedmont section produced but little surplus, and the mountain region was almost a complete failure so far as surplus was concerned, but black locust yielded some and saved the bees from starvation throughout that great section.

Conditions: This summer marked one of the greatest progresses in beekeeping in many years, much increase made, requeening, bees all heavy with stores with plenty of brood and young bees to assure good wintering, etc.

Miscellaneous: Beekeepers are now turning more and more toward beekeepers' meeting. The Georgia State meeting convenes October 8 and 9. We are expecting a large gathering and a great time in Homerville. Of late years we are giving more attention to good entertainment, and we are trying to build up this feature so as to insure good attendance.

If reports are true there will be a good representation from this state at the Lynchburg, Va. meeting. We are all planning to go and give that meeting a great boost.—J. J. Wilder, Waycross, Ga.

• • •

ONTARIO, October 4.

Weather: As intimated in these notes for September Gleanings, August was so cool most of the time that the buckwheat honey crop locally was almost a complete failure. September on the contrary has been warm and balmy and with enough moisture to promote growth to the extent that lawns and fields in general are as green as in June. To date, Oct. 4, we have had no frost to damage anything and weather has been ideal for taking off all supers and getting bees ready for winter. The boys have at least one-third of our bees fed already and as they feed two apiaries each day, as a rule, the job will not take long if present fine weather continues for a while.

Market: Demand for honey locally has continued to be brisk and at this date we have only about 50 eight-pound pails and some 300 fours left, not enough to care for calls that will come during the next few months, but it is too late to remedy matters now. The Honey Producers' Cooperative report ready sales at fair prices and many predict that in three months or more the crop for the current season will be pretty well sold.

Demand for beeswax continues sharp with advancing prices. Just recently an agent of a large paint and varnish company called at our place and wished to place a large order for beeswax. He intimated that his firm had received a big order for tarpaulins for army use, and my impression was that wax was required to make the fabric waterproof. While we are not sure as to the reason for the advance in the price of beeswax we do know that it is much dearer and as a consequence beekeepers may look for a sharp advance in the price of comb foundation for next season.

Conditions: With a warm September and lots of moisture, at least locally, what clover survived the early and long sustained drouth, has made a splendid growth and recently we noticed at least one field of alfalfa that had been seeded this spring on fall wheat, had grown so high that the farmer took off a nice crop of hay in mid-September.

Miscellaneous: As already intimated, we are feeding our bees again this fall and this reminds me of part of an editorial on page 658, October 1941 Gleanings. This reads as follows: "Now the opinion is almost unanimous in favor of a colony large enough for a two-story hive of young bees mainly, a young queen with ample supply of natural honey and **pollen** as much as we can get". With no wish to be controversial, we wish to say that if it is intimated that two stories are intended to be used by the queen all the season, (and this must be what is meant, for I notice that it says "young bees mainly",) young bees would have to be produced late in the season to be there when winter commenced. As far as Ontario is concerned, instead of being almost unanimous, it would be hard to find very many commercial beekeepers who let the queen have full run of the two stories all through the honey season, and indeed we doubt if a majority prefer to winter in two stories. In-so-far as our experience goes, we fail to find any difference in the strength of colonies at the close of the honey flow, whether the queen is confined to one story or two, and we often wonder where the bees will all go when the supers are off as for a while they hang outside, in many cases. But after a week or two they are reduced in numbers very rapidly and by the time feeding starts they are all inside the hives all right.

In practice, we winter mainly in a single brood chamber although we have some 250 colonies with the so-called food-chambers and we have to feed them often to be sure that they have enough for winter. In the spring each colony is given a second body. The queen is allowed to use it until the next super is given, when she is put below and kept there. We have had almost no swarming for years now but we might get a bad swarming season any time—we are never sure about very much in our game! The only time we get any comfort out of two full-depth brood bodies is in the fall, when undeniably such an arrangement saves a lot of work. But we think this, in their favor, is more than counter-balanced by all the extra work they entail throughout the season. Lots of better beekeepers than we are, use the double brood nest for wintering, while on the other hand we know dozens of expert beekeepers who will not tolerate them at all. As yet this is a free country so it is a matter of choice.

As we have had some inquiries as to whether our car of honey reached Great Britain safely, we are glad to report that this car along with some others shipped on the same date, arrived there without mishap.—J. L. Markham, Ontario.

• • •

MISSISSIPPI, October 7.

Weather: Mississippi was very dry during April, May, and June with frequent, excessive rainfall during July and August. September has been about normal with unusually hot weather for early October.

Crop: Good yields were reported from nearly all sections of the state during the spring. At State College an average of 100 pounds per colony was extracted between April 9 and May 20, largely from vetch but with some white clover. Some sweet clover honey was stored in June and July, but rains cut down the yield considerably. Spanish needle has been yielding well in the northeast section of the state during September.

Poisoning Losses: More bees have been killed in Mississippi this summer than in many years, due to widespread arsenical poisoning for cotton insects. This was especially true in the Delta and beekeeping is not advised in that section, although uniformly heavy honey crops are secured there when poisoning does not occur.

Markets: Since Mississippi consumes more honey than it produces, beekeepers who push their product have little trouble disposing of it. However, some of them sell it in bulk at low prices when they could realize much more by building up a local trade.—Clay Lyle, State College, Miss.

American Honey Institute News Notes

Honey is being used widely throughout the country in school lunches. We have had many letters from directors of school lunch projects asking for copies of "Old Favorite Honey Recipes". The California Ladies' Auxiliary purchased 150 copies of the book to take care of the request of one of their state leaders in schoolroom projects and the Institute is deeply grateful to the Ladies Auxiliary of California for this fine cooperation.

• • •

At this time the Institute is beginning its publiciity for HONEY FOR BREAKFAST WEEK next spring. As early as September national magazines have been asking us for the date for 1942. The Institute will hold the same dates for HONEY FOR BREAKFAST WEEK and NATIONAL HONEY WEEK each year. HONEY FOR BREAKFAST WEEK begins Easter Sunday morning and continues through the following week. NATIONAL HONEY WEEK is held the last week in OCTOBER.

• • •

BETTER HOMES AND GARDENS—October issue—in its "It's News to Me!" column had an article on "Old Favorite Honey Recipes". This article read: "Intriguing recipes for honey apple crisp, raisin honey gems, as well as recipes which use honey in sandwiches, meat sauces, beverages, even ice cream, come in a booklet entitled 'Old Favorite Honey Recipes'. Send 10c to American Honey Institute, Madison, Wisconsin." Because of this article requests are coming in from all sections of the country for copies of the book. BETTER HOMES AND GARDENS has a circulation of about 2½ millions.

• • •

The October 4th issue of PRAIRIE FARMER in its column "Foods Honored" listed National Honey Week. This column reads: "Honey celebrates its national week from October 27 to November 2. Honey is a natural sweet, so palatable and so digestible it is recommended by physicians for infant feeding. Honey is rich in energy-producing carbohydrates, and deserves its place in American Cookery." In addition this edition of PRAIRIE FARMER has a page entitled "Red Fruits and Honey". This article gives recipes for Honeyed Apples and Cranberries, and Honey Apple Crisp. The August 23rd issue of PRAIRIE FARMER carried an article, "Youth at the Fair" with reference to the annual State Fair at Springfield, Illinois. This article also said some nice things about honey. PRAIRIE FARMER goes into about 350,000 farm homes.

• • •

The Philadelphia Evening Bulletin of September 24th has listed a weekly menu by which a family of four can eat for $12.03 a week. Honey is featured several times in this menu, being used on different days.

• • •

The Super Market store in Omaha is putting in a meal planner service in which they plan to use honey recipes. We have sent them copies of our literature to aid them in boosting honey.

• • •

Kroger's "Thought for Food" bulletin of September 15th carried the headline "Rookies! Here Come your Cookies". They give recipe for Honey Chocolate Chip Cookies.

• • •

GENERAL FOODS have put out a fine release—October 1st—to publicize National Honey Week.

• • •

The Director of the American Honey Institute gave a broadcast on October 31st over Stations WHA-WLBL on "Holiday Baking Begins". Again on December 13th she will broadcast over these same stations on "Honey Candies for the Holidays".

• • •

A State Bee Inspector from the middle west writes us that he wants some copies of "Old Favorite Honey Recipes" for electric cooking schools. He writes that some of the agents in his state say "These books would sell for $1.00 if you would only ask it".

• • •

A program on a large radio station in the middle west has written for permission to use the recipes from "Old Favorite Honey Recipes" in its daily broadcasts. They write us that the first response to the program—that is, the first day—brought over 500 letters and that the recipes would certainly be tried out.

A splendid view of the Falls from the Park.

Final Notes of the International Meeting

By E. F. Phillips

As has been announced previously, the American Honey Producers' League, the American Honey Institute, the Apiary Inspectors' Association, the Empire State Honey Producers' Association, the Ontario Beekeepers' Association and the National Beekeepers' Auxiliary will hold their meetings in Niagara Falls, New York and Ontario, beginning at noon, November 11, and concluding with the afternoon session, November 14. The Ontario Association begins its meetings the afternoon of the 11th, and the meetings on the New York side of the Falls open with the morning session, November 12. Headquarters and meeting place in Niagara Falls, New York, will be the Hotel Niagara, and on the Ontario side, the General Brock Hotel. Please note that the Ontario meetings are conducted on Daylight Saving Time, while those on the New York side are on Eastern Standard Time.

The sessions are as follows:

November 11, afternoon session—Ontario Beekeepers' Association.

November 12, morning session—Empire State Honey Producers' Ass'n., Ontario Beekeepers' Ass'n.; afternoon session, American Honey Producers' League, Ontario Beekeepers' Ass'n.; Tea, National Auxiliary and ladies, Ontario Beekeepers' Ass'n., General Brock Hotel; 5:00 P. M., Business session, Empire State Beekeepers' Ass'n; Evening session, American Honey Producers' League.

November 13, morning session—American Honey Institute; Ontario Beekeepers' Ass'n. (Final session.). Luncheon, National Auxiliary and ladies of the Ontario Ass'n.; General Brock Hotel; afternoon session—Joint meeting of all organizations, General Brock Hotel; Dinner, for all beekeepers and ladies, General Brock Hotel.

November 14, morning session—

American Honey Producers' League; Luncheon, Apiary Inspectors' Ass'n. (Members only.) Afternoon session, American Honey Producers' League, Final business session.

Beekeepers and their ladies from the United States may enter the Dominion of Canada without difficulty. They should provide themselves with identification as citizens of the United States to facilitate their return, such as a voter's card, and old passport or a birth certificate. The only formality pertains to their return to their own country. Canadian citizens may enter the United States to attend meetings on the New York side on presentation of a passport or proper certification by a border official. Please do not fail to arrange for these international affairs, for the joint session and the dinner on the Ontario side will be outstanding. An official of your voting precinct can arrange everything for you.

For each session on the program is planned as a unit, so that the subjects of the talks will not be too scattered. All speakers have agreed to be present and the program will be full. Arrangements will be made for the sale of tickets to the luncheon for ladies and the dinner for everybody to be held in Ontario on both sides. Those desiring to stay at headquarters hotels should make reservations promptly, but there are plenty of other hotels, tourist homes and cabins for those who wish to stay elsewhere.

It is especially recommended that those who come from a distance arrange to visit points in Ontario and in New York and adjacent states before returning home. Information regarding places of interest and routes will be available at the registration desks.

"Spike Horn" Meyers and His Wild Honey

—Photos by The L. L. Cook Co., Milwaukee, Wisc.

Up in central Michigan, at Harrison, Rt. 127, there is a bee man who goes by the name of "Spike Horn" Meyers. He sells wild honey right from the bee tree. You see it is this way; his bears, of which he has several, he says, with a twinkle in his eyes, find the bee trees and he gets the honey. This he sells to the public as wild honey. When visitors come he shows his bears, his wild cabin in the woods, and the products of his handwork in the form of wooden souvenirs. When you go through Michigan be sure to call on him. Spike Horn dressed as a trapper, unshaven, lives like a hermit in the woods. He has kept bees and still loves them. Beekeepers are particularly welcome.

Asked and Answered

How to Handle Laying Worker Colonies

Question.—I would like to know what can be done with a colony of bees that have become queenless and contain laying workers. Can they be requeened or united with another colony? — Elbert W. Piety, Indiana.

Answer.—A laying worker colony is seldom worth fooling with. As a rule, it is practically impossible to get a new queen introduced. If the colony is populous and worth requeening, you might try introducing a queen by the following method: Tack a piece of wood or tin over the candy covering the hole in the end of the introducing cage and leave this piece of wood or tin on for six days, while the cage is in the hive. At the end of six days remove the piece of wood or tin and destroy all queen cells that may have been started in the meantime. Permit the bees to release the queen in normal fashion. This retarded liberation of the queen usually gives the bees a chance to become well acquainted with the queen in the cage before she is liberated. It is usually preferable to unite a laying worker colony, with bees in another hive. To do this, set the laying worker colony with bottom-board removed on top of a normal colony with cover removed. Do this late in the evening with as little disturbance as possible.

Upper Entrance During Winter

Question.—I have figured on wintering my bees outdoors on their summer hive stands. The hives are protected by four rows of pine trees on the west and north side. They will be covered with snow most of the time. Should I put top entrances in the hive? If so, in which box should the hole be put, the top or bottom? Would they get air when there is a crust on the snow? Should they be wrapped in tar paper?—Harold Steinback, Wisc.

Answer.—The rows of pine trees on the North and West side of the apiary should furnish some protection against the prevailing winter winds. A windbreak is quite essential for good wintering. Your hives should have some additional protection. Coarse plainer shavings or wheat chaff should be used between the paper and the hive. It would be well to bore a ⅝-inch hole in the front and middle of the brood chamber, tacking the paper around this hole in order to permit the bees to fly out in case the bottom entrance should become clogged with dead bees or ice. This hole should be in the upper brood chamber, or food chamber, near the hand hold. This upper entrance permits moisture to escape from the hive and it also gives bees a chance to have a winter flight when a warm sunny day comes. The bees can get out of the hive easily through this entrance, whereas, if they had only the bottom entrance, they would have to go down through the bottom of the hive where the air is somewhat cold, in order to get out.

More About Upper Entrances

Question.—I would like to know if the lower entrance is left open when using the top one for wintering.—R. H. Grill, Iowa.

Answer.—When an upper entrance is used for wintering, the lower entrance is usually left open. It may be restricted to about 2½ inches by ⅜ of an inch to exclude mice. There may be some beekeepers who use only the upper entrance during winter with no lower entrance. We are now of the opinion that it is an advantage to have a small lower entrance as well as an upper entrance. This permits a circulation of air through the hive and should result in moisture being carried out of the upper entrance. Here at Medina we use an upper front entrance consisting of a ⅝-inch auger hole bored near the hand hold in the front of the upper brood chamber. We also have a small lower entrance.

Queen Excluders in Comb Honey Production

Question.—Is it necessary to use a queen excluder to prevent the queen's laying in the sections of a comb honey super?—Mrs. Victor Skinner, Md.

Answer.—It is unnecessary to use queen excluders in the production of comb honey. A queen will rarely, if ever, go up into the comb honey sections to lay eggs, especially if you use full sheets of foundation in each section. If, however, you use starters instead of full sheets, the bees will build drone cells in part of the section and thus queens will be attracted up into the comb honey supers to lay unfertile eggs.

Wintering Bees in Michigan

Question.—This being my third attempt to winter bees in this climate and no luck,

can you give me any information as to how it is done?—C. A. Smith, Mich.

Answer.—To winter bees successfully in your state, each colony must be very populous late in the fall and should have an abundance of good stores, preferably white, well-cured honey. We practice the double story or food chamber method of wintering. This means having the upper brood chamber, sometimes called the food chamber, well filled with honey, in addition to what honey there may be in the lower brood chamber. Bees need protection from the prevailing winds during the winter. This can be brought about by having the apiary located in a spot with natural wind protection, or erecting a fence consisting of boards about one inch apart, to break the force of the wind. An evergreen hedge furnishes splendid wind protection during the winter. It is an advantage in your locality, to wrap each hive in slaters' felt, with a little straw or wheat chaff between the paper and the walls of the hive. Be sure to leave the entrance so that the bees can get out. Hive entrances should be reduced to at least three or four inches by three-eighths of an inch, to exclude mice.

Severe Case of Bee Sting

Question.—Do you know of anything at all that can be done for a bee sting? We, of course, have bees and there are always some around the house. When I get stung it puts me right to bed. In ten minutes after I am stung I start swelling from the top of my head to the tips of my toes, even my ears swell up just as stiff as a board, the inside of my head pounds, and I can hardly breathe—not at all through my nose. A yellow substance runs out of my nose which looks like bile. It takes me about 2 days before I can get back on my feet again and another two weeks before I can breathe properly through my nose.—Mrs. James Wm. Hill, Michigan.

Answer.— It seems apparent that you are one of the comparatively few people who are affected seriously by a sting from a honeybee. As a rule, most people become immune to bee stings. A few people may not become immune. Of course, you should avoid being stung, if possible. If, however, you should get stung and you are badly affected by the shock, a physician should be called and in the meantime you should get into a tub of warm water containing about three-quarters of a pound of baking soda and remain as quiet as possible. If there is a shortage of breath, an electric fan blown in your face will help. For critical cases of bee stings, a treatment consisting of hypodermic injections of a one to one-thousandths solution of epinephrine is recommended. The solution may be obtained from your druggist, or epinephrine tablets may be procured and kept on hand so that a fresh solution may be made very quickly if needed. Epinephrine (formerly known as adrenaline) is worthless unless given hypodermically. It will doubtless be advisable for you to consult your physician, also to do everything possible to prevent being stung in the future.

Uniting Two Colonies Into One

Question.—"Information Please" on how to combine two small hives of bees into one Root 10-frame hive.—H. B. Emmrich, Texas.

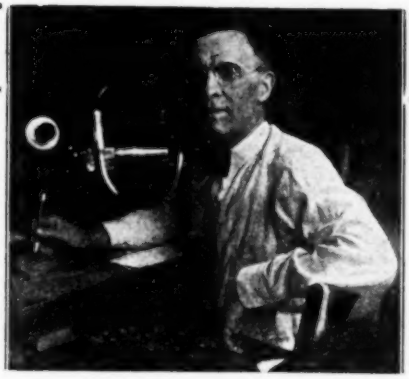
Answer.—This can be done by placing one hive on top of the other, with a newspaper between the two hives, the paper having a few small holes punched through it, with a pencil, to admit ventilation into the upper hive. In due time the bees will gnaw the paper away and the bees will gradually unite. If the two colonies being united have queens, one of the queens will be disposed of and the other retained. We have united colonies during a good honey flow without using the newspaper. When little nectar is being carried into the hives, it is safer to use the newspaper. After the bees have united, the empty combs, if any, may be removed, leaving the bees on the combs containing honey, thus reducing the space down to one 10-frame hive, if this seems desirable.

What to do with Combs Above AFB Colonies

Question.—I have some combs that were on a colony that I did not know had AFB. They were above the excluder. Do you think it would be safe to use them above again?—T. O. Devers, Ohio.

Answer.—According to the best authorities it would be unsafe to attempt using combs that have been in supers, above queen excluders, on colonies infected with AFB. However, if the colonies were not badly infected and if the combs that were above the excluders were virgin combs containing only a small amount of honey, there might be a possibility of using them without any bad results. If and when such combs are used, a very close watch should be kept of colonies on which such combs are used. Furthermore, all such combs should be confined to the smallest number of colonies possible. We do not recommend such procedure but we are simply saying that it may be possible to use such combs without any bad results.

Talks to Beekeepers



M. J. Deyell at his desk.

Getting Up at 5 A. M. to Take Off Honey

Yes, that's what I did two days ago. My wife smiled when I said, the evening before, that I intended to get up early. But I fooled her. And what a thrill one gets being out of doors before the sun is up.

I had put bee escapes under the supers three days prior to removing them. When I took off hive covers that morning scarcely a bee was found in the supers. It was unnecessary to light a smoker or to put on a bee veil. The bees hardly realized that the surplus honey they worked so hard to store was being taken. However, I left each colony in a double brood chamber hive, with the upper chamber, (usually called the food chamber) crammed full, also 20 to 25 pounds in each lower chamber. I shan't worry about those colonies running short on stores between now and next June, barring very abnormal conditions.

I should perhaps say that conditions have been ideal this fall for getting the brood chambers well filled with honey. We had an unusual goldenrod flow and white aster is now yielding when the weather is right. (This is Oct. 14.) Yesterday I looked into a normal colony and found a small patch of brood in each of four combs occupying the center of the lower brood chamber. The bees were filling the cells with nectar where young bees had emerged.

Doolittle Got Up at 3:30

Those who have read the book, "A Year's Work in an Out Apiary", by G. M. Doolittle, may recall his account of the early morning trip in his Model T Ford to an out-yard to mow grass before bees started to the fields. Doolittle had me beaten by an hour and a half. He left home at 3:30. His description of the glorious early morning hours enjoyed while driving to the out-apiary is a classic.

My trip home with the load of honey from the out-yard six miles from Medina, will never be forgotten, because I drove towards the rising sun which peeped over the horizon just before reaching home. I'll have to admit I hadn't actually watched the sun rise for many a moon. Have you? If you have not, it's certainly worth the effort it takes.

Differences in Locations

I have been puzzled, more than once, over this matter of apiary locations. I have two apiaries of my own. They are about two and one-half miles apart, as the crow flies. The territory surrounding each apiary appears to be the same. This year the per colony yield in one yard was almost double what it was in the other and this has been the case during the past four seasons. Both apiaries receive identically the same management. In fairness to the situation I should say that one apiary has more colonies than the other and the smaller apiary makes the bigger yields. Perhaps the larger apiary is over-stocked, but I hardly think so. I am inclined to believe that soil conditions have more to do with nectar secretion that most of us suspect.

During the past twenty years, in managing around 1000 colonies for the Root Company, the bees scattered in eighteen yards, some of them eighty miles from Medina, I have observed that some of the apiary locations that appeared to be unusually favorable for honey have not proven so good as others that are less promising. One apiary in particular with 75 colonies, in a location that is anything but promising for nectar, has consistently piled up larger crops during the past ten years than have other similar sized apiaries in that area that appear to be in better locations for honey. It seems to me that the only satisfactory way of finding out whether or not a location is good for beekeeping is to put some bees in the location. Of course, we can be governed to a certain extent in the selection of an

apiary location by the abundance, or the apparent lack of honey and nectar plants, but even that doesn't tell the entire story. To me there is something mysterious about this matter. Some other beekeepers may have this problem solved.

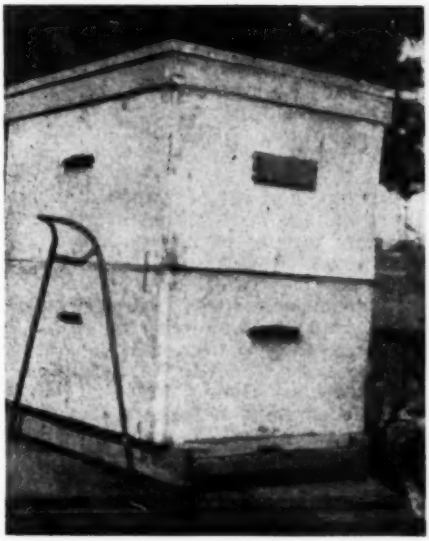
Getting Away from it All

About once a year I like to run away for a week or so from the daily grind of letter writing, editing articles, and managing bees. On Sept. 20 wife and I (the kids are all married) took a trip into Canada. I have made it a rule, during summer vacations to avoid, as much as possible, calling on beekeepers, much as I would enjoy it. To me a vacation doesn't fulfill its purpose unless one can get away from regular routine and have an entirely different experience and line of thought. It was impossible, however, to forget bees entirely.

While enroute to Ontario via Niagara Falls, Sept. 20, we noticed the unusual amount of goldenrod and white aster in northern Pennsylvania and New York, west of Buffalo. If beekeepers in that area didn't get some surplus fall honey I have missed my guess.

We found some goldenrod and as-

(Continued on page 728)



This device for carrying hives of bees is used by Lewis B. Avery, Clinton, Mich. There is a carrier on each side of the hive and two men are required to carry it. This is a convenient gadget to have when carrying hives heavy with bees and honey, into bee cellars during November. Although it takes the time of two men the effort put forth is negligible.

This apiary was owned by William Moon, of Copemish, Mich., now deceased. The eighty colonies were kept close to a school for many years. Mr. Moon was careful to manipulate the bees properly in order to avoid having the school children stung. This shows that good-sized apiaries may be kept in towns, provided the owners are careful to open the hives only during warm weather when bees are gathering nectar.

EDITORIALS

(Continued from page 707)

Wet packing or frozen packing, are they worse than no packing? Have we been putting too much stress on insulation and not enough on the internal condition and size of the colony?

On any and all of these questions there can be an honest difference of opinion, but let us be frank and get the facts.

Dr. C. C. Miller, one of the best informed beekeepers in the country, once read an excellent paper at a Chicago Convention in the early days bearing the title, "What I Don't Know About Bees". More of us in these later days better assume some of that frankness.

We once dug out of Caesar in our old school days this striking truism. Said Caesar, "Most people believe what they want to believe". This will explain what another authority of more recent times has said in the person of Josh Billings, "What's the use of knowing so much when so much you know ain't so?"

• • •

Honey Prices as Shown by Government Market Report for October 1st

The season for 1941 has now advanced to a point where crops have been harvested and the prices on honey have begun to reach their levels.

First, the crop of all honey for the whole country is below normal and below what earlier forecasts indicated. The only exception was in some sections of the north central states where bumper crops were reported.

In going over Government figures some distinctions should be drawn.

(1) Are the prices quoted delivered or f.o.b. shipping point? Freight may add from one quarter to a full cent or more at point of delivery.

(2) Are the figures quoted based on **ton** or **car lots?** Between the two there may be from one half to three quarters of a cent difference. California quotes often in ton lots. In the mountain and central states carlot figures are given.

(3) Extracted honey is often quoted in case lots of $5.40 to $6.00. (Cans and cases not returned) and in ton lots at that, f.o.b. shipping point.

(4) Quotations in car lots are usually based on honey in new cans; sometimes the figures cover honey in second-hand cans. Again figures cover the honey only, the cans to be returned.

(5) While little is said about it in advance, the buyer will pay less from a half to a full cent if the honey is thin. While a Government standard accepts 18.6 water content in a honey, buyers prefer and sometimes insist on not more than 17.6. A western honey may run as low as 15.4 but usually about 17.0.

We present the foregoing more for the benefit of the producer than for the buyer who is careful not to buy a thin honey that must be blended with a thick honey at some expense.

Now let us scan the Government quotations. In general they average about a cent higher in car lots than last year. The quotations in the East are usually higher than in the far West. This is largely due to the added difference in the freight according to the distance.

Some are holding their honey in the belief that the price will advance. With the large reserves of sugar in Cuba and this country history probably will not repeat itself unless in the future sugar is again scarce and therefore rationed.

One who is in a position to know said, "there will be no competition in sugar-buying between the United States and Great Britain". This means that the two countries apparently intend to prevent sugar from going up as it did during the first Great War.

Wax on the other hand is now (Oct. 13) probably higher than the Government figures for October 1st show. They have now reached a level of the first Great War and in this connection it should be noted that 20 years ago wax reached a point where industrial users refused to pay the price and used substitutes and wax took a tumble. Will history now repeat itself? One guess is as good as another. There is plenty of wax in the country but beekeepers have been holding it with the expectation that higher prices are in the future.

In the Government Marketing Reports it is noted again that the wholesale prices on honey have advanced relatively more than have the retail prices. This is, no doubt, due to price cutting on the part of big and little packers, either to scoop the business, or to put the other fellow out of business. Reference is made to this ruinous practice elsewhere.

JUST NEWS

(Continued from page 704)

Honey Recipes" to the Auxiliary having most members above fifty at the end of the year, November 11; and fifty copies of the same book to the Auxiliary not over two years old which has most members at the end of the year. These prizes are personal gifts of the President and Secretary of the National Beekeepers' Auxiliary to the Auxiliary.

Another contest is being carried on by the Auxiliary in support of the American Honey Institute. The Institute will give one hundred copies of "Old Favorite Honey Recipes" to the Auxiliary having most members sending at least one dollar to the Institute before November 12.

Dues to the National Beekeepers' Auxiliary are twenty-five cents per year. One more News Letter will be sent before the National Convention at Niagara Falls, November 12. The beekeeping industry needs a well-organized women's auxiliary with a large membership supporting the American Honey Institute. Send your dues today to Mrs. E. H. Bremer, Route 1, Box 368, San Antonio, Texas—Mrs. E. H. Bremer, Secretary, National Beekeeper's Auxiliary.

• • •

The Montana State Beekeepers' Association will hold its annual meeting at Bozeman on Nov. 19 and 20. There will be election of officers and an interesting program is being worked up.—Willard A. Bell, President.

Bee Sting Venom an Antidote for Snake Bite

Dr. Bodog F. Beck of New York City, wrote us recently as follows:

Dear Mr. Root: During one of our many interesting conversations on the subjects of bee venom and honey, once you asked me whether a beekeeper who is immune to bee venom is also immune to rattlesnake venom. As I told you at the time, I am firmly convinced that he is. Of course, this is difficult to prove because, naturally, I would never take a chance to have a beekeeper bitten by a rattlesnake for an experiment, just to prove my contention. The fact is that the two venoms are alike in their physiological effects. The amount of venom which the snake injects greatly varies. If the snake just consumed a meal, the bite is not so dangerous, having less venom at its disposal to inject into the victim. Such experiments can be performed only on animals.

The purpose of my present writing is in a similar field but somewhat different. It refers to the effect of bee venom on other snake bites. In a Polish Bee Journal which is published in Warsaw, a Mr. B. Kisielinski tells how bee stings saved him from the consequences of a snake bite. His letter is as follows:

"In 1915, during the war, I served as a legionary with the first Lancers. We were part of the vanguard of the retreating Russian line. While encamped on the banks of the River Styr in the Pinsk territory I found myself on a certain night one of a party of scouts which was sent out reconnoitering the surrounding forests. Our first object was a way-side inn, situated at the point of intersection of several roads which cut through the swamps in different directions. Having arrived near the inn we threw out pickets, and then hid in the dense underbrush. We were all sitting down holding our horses by the reins. I was seated on a stump under a large tree. Feeling much pain in one of my feet, I pulled off the boot. My horse chose this moment to shy and gallop away. With only one boot on I rushed after the runaway. In my hurry I must have come too near a swamp adder, but was unaware of it at the time. Having captured the horse I returned with it to my tree-stump and put on my boot. After a short while I began to have a feeling as if the boot was getting ever more tight. On closer inspection I found the leg swollen so much that it was impossible to pull off the boot. Without further pause I ripped open the boot with my sword, in order to allay the pain. Now the leg was swollen so much and to such a size that I could neither bend, nor even move it. The I began to feel real terror. What could I do? Our doctor is somewhere with the staff, and God knows where that is. I began to think that I was in a hopeless fix indeed. The pity of it: to have come so far unscathed through the war, and now to die from the bite of a despicable little worm of a swamp-adder! But I did not give up hope altogether—if I can hold out till daylight help may yet be found for me. Wearily the hours drag on. At last the first streaks of dawn begin to show. With the first daylight my comrades go off to the inn to see whether they can get a horse and wagon there to take me to the nearest lazaretto. The innkeeper assures them that he has neither horse nor wagon. However, on hearing what they wanted the conveyance for, he just smiled and said: 'Little brothers, bring your comrade here to me, and I will cure him'. I was carried into an orchard and put down near some bee-hives. The bee-master, for such he proved himself to be, now took a bee and made it sink its sting into the wound. After he had applied some ten bees in this manner he said: 'Dowolno (that will do)'. Then he brought a vessel with sour-milk and covered my swollen leg with it. Soon I began to feel the pain grow less; and after only a few hours I was in the saddle again. 'What wonderful physicians the little bees are!' I said to myself, 'they gave their life to save mine!' From that day dates my love for bees. After the war I became a beekeeper. Bees are a blessing from God and without my bees life would hold little for me worth living for."

Buy and Sell Here

CLASSIFIED ADS

Only responsible advertisers and honest advertisements will be admitted to these columns. References required from new advertisers not known to us. Rate—7 cents per counted word each insertion. Each initial, each word in names and addresses, the shortest word such as "a" and the longest word possible for the advertiser to use, as well as any number (regardless of how many figures in it), count as one word. Copy should be in the 10th of month preceding.

HONEY FOR SALE

NEW CLOVER in new 60's. E. S. Miller, Valparaiso, Indiana.

FOR SALE—Clover honey in new 60's. G. M. Sowarby, Cato, N. Y.

FRANK RASMUSSEN, Greenville, Michigan. Comb and extracted honey.

FOR SALE—Extracted and comb honey. M. W. Cousineau, Moorhead, Minn.

HONEY—Light and light amber extracted. F. W. Lesser, Fayetteville, N. Y.

WHITE clover honey. New cans. $7.80 per case. Edward Klein, Gurnee, Ill.

CHOICE MICHIGAN clover honey in new 60's. David Running, Filion, Mich.

CLOVER extracted, extra white new sixties. Irvin Van Devier, Medina, Ohio.

CHOICE clover honey in 60's. R. C. Bish, successor to Moore Apiaries, Tiffin, Ohio.

LIGHT AMBER, 6½c; Spanish needle, 6c. Sample 10c. Joseph Fekel, Vineland, N. J.

30 TONS white clover honey in new cans and cases. Leroy C. Keet, Watertown, N. Y.

CLOVER honey in new 60's, 7c per lb. Sample 10c. Kenneth Gallant, Jordan, N. Y.

FOR SALE—Fancy Iowa white clover extracted honey. Kalona Honey Co., Kalona, Iowa.

CHOICE white clover comb and extracted honey. Harry T. Gable, Romulus, New York.

CLOVER HONEY in sixties and comb honey. George Eykamp, Route 6, Evansville, Ind.

WHITE and light amber extracted honey, best quality. Herman Crowther, Cass City, Mich.

FOR SALE—Nice white clover-basswood honey, $115.00 per ton. J. G. Burtis, Marietta, N. Y.

FOR BEST Michigan clover honey, write E. D. TOWNSEND & SONS, Northstar, Michigan.

FINEST QUALITY white clover honey. Sample 10c. Arthur Thayer & Sons, Freeland, Mich.

ORANGE palmetto and mangrove honey in new sixties. Peter W. Sowinski, Fort Pierce, Florida.

FOR SALE—White clover extracted honey in 60-lb. cans. L. S. Griggs, 711 Avon St., Flint, Mich.

EXTRACTED clover and amber honey. Quotations on request. Scott Traxler, Scottsburg, N. Y.

WHITE and EXTRA white clover extracted honey. New cans. Prices on request. Sample 10c. Frank R. Parmelee, LeRoy, N. Y.

NEW sweet clover comb, 14 to 16 oz., case of 24 sections, $3.50. Clarence Engle, Kearneysville, W. Va.

TUPELO HONEY, new 60's and barrels, 5 and 10 lb. buckets. Marks Tupelo Honey Co., Apalachicola, Fla.

BUCKWHEAT honey, 6 cents, also goldenrod-aster, 7 cents, in new 60's. Woodward Apiaries, Clarksville, N. Y.

EXTRA white clover, 6½c; No. 1 to Fancy white comb, $3.00; amber, $2.50. Howard Grimble, Holcomb, N. Y.

LIGHT fall comb honey, No. 1, $2.50 per case, 24 sections. Buckwheat mixed, same price. Noel J. Loucks, Springboro, Pa.

FOR SALE—Here we come for your patronage. With tons of fine clover. Sample free. W. S. Earls, New Canton, Ills.

HONEY FOR SALE—All kinds, any quantity. H & S Honey & Wax Co., Inc., 265-267 Greenwich St., New York, N. Y.

LET US show you how you can save on your honey purchases. We also buy honey. H. Blitz, P. O. Box 3452, Philadelphia, Pa.

NO. 1 fall comb, $3.00 per case; No. 2 fall comb, $2.50 per case; clover extracted, 7c; amber, extracted, 6c. N. B. Querin, Bellevue, O.

COMPLETE line comb and bottled honey, pure clover. Also packed in 5's and 60's. Central Ohio Apiaries, Inc., Millersport, Ohio.

MICHIGAN'S FINEST WHITE clover honey. New cans, full weight, clean, 6½c. You will be pleased. John McColl, Tecumseh, Mich.

BEST New York clover honey packed, as ordered. Small or carload lots. Angus Carruthers, Bonnievue Apiaries, Rt. 2, Syracuse, N. Y.

SELECT LOTS white clover, buckwheat, basswood, and light amber honeys in 60-lb. tins. A. I. Root Co., 224 West Huron Street, Chicago, Illinois.

FOR SALE—500 cases of comb honey, 50 tons of white extracted. Make me an offer. Robert Case, 424 Wellington Avenue, Rochester, New York.

NO. 1 to Fancy light comb honey, $3.25 per case; No. 2 and amber, $2.75; in window cartons, 25c extra. Extracted, 6½c in 60's. H. R. Shelton, Parma, Mich.

HONEY PACKERS—Write us for prices on carload lots of California and western honeys. We stock all varieties. Hamilton & Co., 1360 Produce St., Los Angeles, California.

CHOICE clover and buckwheat honey in liquid or pasteurized finely granulated form. Packed in all standard tin and glass containers, uniform in color, flavor and moisture content. Write for prices. Finger Lakes Honey Producers Cooperative, Inc., Groton, N. Y.

CHOICE Light honey in 60-lb. cans, 6½c. F.O.B. here. David Conn, Roaring Branch, Pa.

NORTHERN Michigan clover honey, water white, new cans. C. J. Freeman, Mesick, Mich.

FOR SALE—Three hundred cases comb honey, Fancy white and No. 1. F. B. Loomis, Rushville, N. Y.

FOR SALE—25 tons white clover honey in 60's at 6¾c. Mostly cartoned. H. L. Wood, 442 Irving St., Toledo, Ohio.

FOR SALE—All grades comb honey 4¼ beeway sections. Will pack to suit. Write for prices. E. W. Long, St. Paris, O.

FANCY white comb, $4; No. 1, $3.50; No. 2, $3 per case of 24 sections, six cases to carrier. Clover extracted in new cans, 7c discount on honey taken from our door. H G. Quirin, Bellevue, Ohio.

NEW YORK State Comb and extracted honey, buckwheat and clover, any quantity, all size packages. Five-pound pails my specialty. Edward T. Cary, Midland Ave. and Tallman St., Syracuse, N. Y.

HEAVY fancy white comb, $3.75 case; Mim. 12 oz. Fancy, $3.50; No. 1 clover, $3; Buckwheat same as clover; Mixed flowers, $2.75; clover, buckwheat or goldenrod extracted, 7c lb. C. B. Howard, Geneva, N. Y.

HONEY AND WAX WANTED

BEEKEEPERS TAKE NOTE—We will not guarantee any honey buyer's financial responsibility and advise all beekeepers to sell for cash only, or on C. O. D. terms except when the buyer has thoroughly established his credit with the seller.

CASH for 10 tons white clover extracted honey. Lose Brothers, 206 E. Jefferson St., Louisville, Ky.

WHITE and light amber extracted and comb honey. George Eykamp, Route 6, Evansville, Ind.

WANTED—Clover extracted. Can also use some aster or goldenrod. Fairland Apiaries, 2 Acacia Dr., Dayton, Ohio.

WANTED—All grades honey, in car lots or less. Send sample with lowest price. Schultz Honey Farms, Ripon, Wisconsin.

AMBER and WHITE extracted, also Comb Honey and Beeswax. Alexander Company, 819 Reynolds Road, Toledo, Ohio.

WANTED—Comb, chunk comb, white and light amber extracted honey. Any amount. Central Ohio Apiaries, Millersport, Ohio.

WANTED—Carlots honey; state quantity, shipping point and price. Mail sample. Bryant & Cookinham, Inc., Los Angeles, Calif.

CASH PAID for extracted clover honey. Send sample and best price. Clover Bloom Honey Co., General Delivery, Shrewsbury, Mass.

HIGHEST cash returns made the day we receive your beeswax. Write for shipping tags and quotations. Walter T. Kelley Co., Paducah, Ky.

CASH PAID FOR carloads and less than carloads of extracted honey. Send sample and best price. C. W. Aeppler Company, Oconomowoc, Wis.

WANTED—Comb, extracted honey, and sorghum—any quantity. We sell pure maple syrup and sugar. R. C. Poland & Co., Jefferson, Ohio.

WANTED—White clover honey. New cans only. Clover Blossom Honey Co., 721 Kossuth St., Columbus, O.

WANTED—All grades of comb and extracted honey. Bee supplies and honey containers for sale. Prairie View Honey Co., 12243 12th St., Detroit, Mich.

WANTED

WANTED—8-fr. hive bodies and metal covers, reasonable. Give price and condition in first letter. Patten Apiaries, Medford, Minn.

FOR SALE

QUEENBEE PAINTING outfits $1.00 postpaid. Southwick Apiaries, Waban, Massachusetts.

SEE BEEKEEPER'S HOIST at Ames, Nov. 13-14. $15.00. 1942, $17.50. Bee Turner, Corning, Ia.

WAX worked into high quality medium brood foundation, 15c pound; 100 lbs. $10.00. Fred Peterson, Alden, Iowa.

GLASSWARE, Bee Supplies, at factory prices. Write for quotations. Alexander Company, 819 Reynolds Road, Toledo, Ohio.

BEST QUALITY queen mailing cages, freight paid. Free sample. Bee shipping cages. Vernon Homer, Rt. 5, Menomomie, Wis.

PURPLE Loosestrife seed and plants. Russell's bee candy for wintering. Beeswax wanted and in trade, 30c lb. Frederick Russell, Chelmsford, Mass.

COMB FOUNDATION at money-saving prices. Plain, wired and thin section. Wax worked at lowest rates. Comb and cappings rendered. Robinson's Wax Works, Mayville, N. Y.

WRITE FOR CATALOG. Quality bee supplies at factory store prices. Prompt shipment. Satisfaction guaranteed. The Hubbard Apiaries, Manufacturers of Bee Supplies, Onsted, Michigan.

JUST what you have wanted so long—a marvel of Simplicity honey weigher for all small containers up to 10 lbs. Satisfaction guaranteed. Price $1.00 postpaid. Order from this add. M. Pickering, Ada, Minn.

THE ONLY complete line of wax rendering equipment ever offered—the "Perfection" Line. A size and type suitable for every commercial beekeeper. Write for descriptive circular. Robinson's Wax Works, Mayville, N. Y.

SAVE MONEY by letting us work your wax into wired or regular comb foundation. Large catalog describes everything. You pay only wholesale factory prices, as we have no agents. Walter Kelley Co., Paducah, Kentucky.

BEES AND QUEENS FOR SALE

WRITE FOR PRICES on bees and queens. Graydon Bros., Rt. 2, Greenville, Ala.

CAUCASIANS—Untested queens, 40 cts. each, until Oct. 1st. Lewis & Tillery Bee Co., Greenville, Ala.

THREE-BANDED Italian queens rest of season, 50c each, any number. Alamance Bee Co., Graham, N. C.

CAUCASIANS—Tested queens, $2; untested, $1; 10, 75c; 50, 65c; 2-lb. packages with queens, $2; 3-lb. packages, $2.50. Miller's Caucasian Apiaries, Three Rivers, Texas, Oldest exclusive Caucasian breeders west of the Mississippi.

XUM

YORK'S
Package Bees & Queens
Quality Bred Italians

We are closing down our queen yards for this season. Thanks to all of our customers for their patronage and large volume of business.

Package bees and queens for 1942. We expect to be better prepared to give you highest quality. Foundation stock selected for honey production. Will appreciate hearing from you regarding your requirements for the coming season.

YORK BEE COMPANY
Jesup, Georgia. U. S. A.
(The Universal Apiaries)

REQUEEN
now
for better wintering and larger profits next year.
Use those outstanding Quality Queens of imported strain Italians.

"They Produce"

1 to 10	untested	50c each
11 to 50	untested	45c each
above 50	untested	40c each

Rossman & Long
P. O. Box 133 **Moultrie, Ga.**

CARNIOLANS
CAUCASIANS

We thank our many customers for their patronage this season. Preparing for larger output of packages and queens for 1942. Honey and wax prices are advancing and will continue. Ask for free paper about these two races. Learn more about them in making your plans for 1942.

ALBERT G. HANN
Glen Gardner, New Jersey

THANK YOU

Because of the loyal support given us by our customers and friends this has been our best year. May we again say THANK YOU.

WEAVER APIARIES
Navasota, Texas

WE WILL SHIP NO BEES OR QUEENS

the remainder of this year but will be prepared to give you better service with the best in Caucasian bees in 1942.

CAUCASIAN APIARIES
Brooklyn, Ala.

60 CENTS EACH for Bright ITALIAN-AMERICAN young queens, all tested. D. W. HOWELL, Shellman, Georgia.

FOR SALE—30 colonies bees with season's crop of honey and equipment. Bees guaranteed free from disease. Floyd Blackman, Mt. Upton, N. Y.

GOLDEN ITALIAN bees and queens, extra good workers and very beautiful to look at. Queens 50c each, any number. Carolina Bee Farm, Graham, N. C.

NOT TOO LATE to requeen with the finest Italian queens Hollopeter has produced. By return mail, untested, 50c; tested $1.00. WHITE PINE BEE FARMS, Rockton, Pa.

THREE HUNDRED-FIFTY ten-frame colonies and locations—disease-free. One acre land, honey house, out-buildings. Not sacrifice, but reasonable. Ernest Sires, Stanfield, Oregon.

FOR STRONGER COLONIES, bigger honey crops, and gentler bees, try our prolific well-bred 3-banded Italian queens used for years by leading beekeepers of the U. S. and Canada. Select young laying queens, 50 cents each; ten, 45 cents each; twenty or more, 40 cents each. Prompt deliveries, no disease. We have one of the largest best equipped queen rearing places in the South. H. C. Short, Fitzpatrick, Ala.

MAGAZINES

THE INDIAN BEE JOURNAL—The only bee journal in India. Sample copy free. Yearly 7c6d. Apply Editor, Indian Bee Journal. Jeolikote, Dist. Nainital, U. P. India.

RAISE MORE POULTRY for big profit this year. Easily learn how others succeed. Read America's leading poultry magazine. Five years $1.00, one year 25c. Poultry Tribune, Dept. C-29, Mount Morris, Ill.

READ the South African Bee Journal to be conversant with conditions from far afield. Subscription 5/ per year. For further particulars, write to the Hon. Treasurer, P. O. Box 43, Cleveland, Johannesburg, S. Africa.

MANY beekeepers have proven raising fox, mink, nutria, muskrats, rabbits, highly profitable. Send dime for sample copy. Canada's oldest fur farming magazine telling how. Fur Trade Journal of Canada, Box 31, Toronto, 2, Ontario.

THE BEE WORLD—The leading journal in Great Britain and the only international bee review in existence. Specializes in the world's news in both science and practice of apiculture. Specimen copy post free, 12 cents stamps. Membership in the Club, including subscription to the paper, 10/6. The Apis Club, L. Illingsworth. The Way's End, Foxton, Royston, Herts, England.

Quality Italian Queens
PRICES

One for ....$ .35
Three for ... 1.00

W. O. GIBBS
Willacoochee, Ga.

WHEN WRITING TO ADVERTISERS, MENTION GLEANINGS

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933, OF GLEANINGS IN BEE CULTURE, PUBLISHED MONTHLY AT MEDINA, OHIO, FOR OCTOBER 1, 1941.

State of Ohio, County of Medina, ss.:

Before me, a Notary Public in and for the State and county aforesaid, personally appeared E. R. Root, who, having been duly sworn according to law, deposes and says that he is the Editor of the Gleanings in Bee Culture, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Name of— Post office address—

Publisher, The A. I. Root Co., Medina, O.

Editors, E. R. Root and M. J. Deyell, Medina, Ohio.

Business Manager, M. J. Deyell, Medina, O.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

The A. I. Root Co., Medina, Ohio; Belva M. Demuth, Medina, Ohio; Kate Gunkleman, Rt. 4, Medina, Ohio; J. T. Calvert, Medina, Ohio; H. H. Root, Trustee A. I. Root Estate, Medina, Ohio; E. R. Root, Medina, Ohio; H. H. Root, Medina, Ohio; R. I. Bostwick, Seville, Ohio; Alan I. Root, Medina, Ohio; Trustees Profit Sharing Fund, Medina, Ohio.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the twelve months preceding the date shown above is

(This information is required from daily publications only.)

E. R. ROOT, Editor.

Sworn to and subscribed before me this 7th day of October, 1941.

HAROLD C. WEST, Notary Public.

(My commission expires March 27, 1943.)

THE EXPERIENCES OF A NOVICE IN BEEKEEPING

(Continued from page 702)

time that there seemed to be a *great many* bees about, but supposed it to be those that were out foraging.

I felt quite relieved after getting the last piece into the frames, and put them safely in the hive, where it had stood all the time.

The next thing was to put the bees in. On opening my box they looked about as bad as those that had been strained out of the honey. I put some in front, and they would not crawl in, (fly they could not,) and finally put the whole on top of the frames, and poked them down through; but they only crawled out again down into the dirt, until the ground looked as if so many ants were crawling in every direction. A part of them that were better off would persist in clustering up by the window, on the roof overhead; in short, anywhere except in that Langstroth hive.

Finally, after much time and trouble by night, I had some of them in the hive, the robbers having licked them off, and also having licked their hive out clean—that is, pretty near.

The robbers were on hand next morning bright and early, but I closed the entrance nearly, and as there was not much in the hive, I managed with great care to keep them two or three days, but noticed that they were continually crawling all over the hive, and seemed disconcerted, until one morning I discovered a cluster of bees, apparently almost dead, on the underside of a bench a few feet from the hive. I placed them on the alighting-board, and was much surprised and elated to see a very strange-shaped long black bee stalk majestically from the midst of the cluster to the entrance, and go in, and then there was rejoicing both by the bees and myself, as I knew then that I had *actually seen that famed personage,* (whose existence was so much doubted,) a QUEEN BEE.—A. I. R., April, 1867, A. B. J.

HONEY LABELS
Beautiful Designs
The A. I. Root Co., Medina, O.

TALKS TO BEEKEEPERS

(Continued from page 721)

ter in Ontario but I understand these plants are not dependable nectar sources in parts of that province. Buckwheat, which usually gives a surplus there, was practically a failure this year, due to unfavorable weather. It may be necessary for some Ontario beekeepers to feed some sugar syrup this fall to make up the deficiency in natural stores. I met at least one large commercial beekeeper who runs his bees throughout the season in double brood chambers who said he would not have to feed a pound of sugar this fall. I hefted some of his hives and I agreed with his statement. I met another commercial beekeeper who has used the food chamber hive for many years and he said that he would have to do some syrup feeding, but that he hadn't fed a drop of sugar syrup for many years.

Mr. J. L. Byer, our Ontario correspondent whom I have met at the Toronto bee meetings during the past seven years, takes a "fling" at the "food chamber" occasionally. See page 714, this issue. I like Mr. Byer. We are friends, even though we do not agree on the use of the food chamber. I hope Mr. Byer reads the foregoing paragraph.

Mr. Byer wonders what is meant by "mainly young bees" in the editorial referred to on page 658 October, 1941, Gleanings. I would say it means bees that emerge after Sept. 1 in the latitude of Ontario. Many of the old field bees that help harvest the late crop during August die before spring, hence the importance of having winter clusters consisting of a goodly percentage of young bees.

In the last paragraph of Mr. Byer's report he says, "As yet this is a free country so it is a matter of choice". Very true. And so, if Mr. Byer wants to buy sugar to make up syrup to feed bees late in the fall instead of reserving natural stores for winter and early spring bee food, that is his affair. It may be that his method fits conditions that obtain in his locality.

However, if I had to feed bees sugar syrup in the fall, well,—I hardly think I would keep bees. I haven't fed a drop of syrup to bees in the fall since 1923 and I have been managing around 1000 colonies. Honey is good enough for my bees. Furthermore, why boost the sugar industry by purchasing a considerable amount of sugar each fall?

If I am not mistaken a test was made at a Canadian experimental station some years ago comparing the condition of colonies wintered on sugar syrup with colonies wintered on well-ripened honey. The colonies wintered on honey came through in better condition than colonies fed syrup. Mr. C. B. Gooderham of Ottawa can set us right on this matter.

Some authorities recommend feeding a pail of syrup late in the fall, following the cessation of brood-rearing, to correct the possible bad effects of late-gathered honey of inferior quality. This may be an advantage, especially in the far North where bees are wintered outdoors and do not get frequent winter cleansing flights, or, where bees are confined in bee cellars for five or even six months.

While waiting near Callander, Ontario, to see the "Quints" we drove out into the country a few miles and noticed a neatly-kept apiary. I wanted to see if bees in that area had sufficient winter stores, so I called at the house. A woman came to the door. She spoke French and I couldn't understand her, even though I spent a year in college studying that language. She couldn't understand me and evidently thought I was a government inspector. So I didn't examine the hives.

On our drive west from North Bay, through Northern Ontario to Sault St. Marie, we didn't see a bee hive. Parts of that country are bleak and rocky, other sections seem suitable for farming. After crossing by ferry into upper Michigan we traversed a rough and rugged country to Marquette on Lake Superior. A southern course from there took us through Green Bay, Wisc., and Chicago, then home. Still we did not see a hive. Beekeepers must keep their bees hidden.

BETTER-BRED QUEENS---Three-Banded Italians

We appreciate your business in the past and solicit your future business on the merits of our service and quality. Let us quote you our 1942 prices.

CALVERT APIARIES, Calvert, Alabama

ADDITIONAL JUST NEWS

The Oregon State Beekeepers' Association will hold its annual meeting in Portland, Oregon, on Friday and Saturday, November 21 and 22. One or more speakers are expected to give the latest news from the experiment stations.

• • •

The California State Beekeepers' Association meeting will be held in Stockton, Dec. 3-5.

• • •

The meeting of the Colorado Beekeepers' Association will be held in Denver, Colorado, November 6 and 7th.

• • •

Feeding of bees will be necessary to supply adequate winter stores, in parts of the clover region where goldenrod and aster are not abundant, also where weather conditions were not favorable for a flow from aster.

• • •

E. C. Bessonet, Donaldsonville, La., manager of Garon Bee Company, for the past fourteen years has resigned to form the Bessonet Bee Company, with son Calvin as partner. Our good wishes to Mr. Bessonet in his new venture.

• • •

Reprints from the Transactions of the Wisconsin Academy of Sciences, Arts and Letters, Vol. 32, pp. 273-277, 1940, entitled, "Degree of Pigmentation and Potential Acid-Base Balance of Honey", by H. A. Schuette, Warren W. Woessner, Ralph E. Triller and D. J. Huenink of the Dept. of Chemistry, University of Wisconsin, Madison, are now available.

A REMINDER

It's getting time to start making plans for next season. Winter is a good time to purchase and assemble new equipment, repair and clean up equipment that is in use, and book your requirements for package bees for the coming year.

WRITE US WHEN YOU NEED PACKAGE BEES, QUEENS, BEE SUPPLIES, OR HONEY.

The Stover Apiaries

Mayhew, Miss.

MUTH'S WAX RENDERING DEPARTMENT IS ALWAYS BUSY

Our steam-jacketed pressure tanks are perfect for rendering all the wax from the comb and cappings . . . Thousands of beekeepers from all over the nation send their combs to MUTH for rendering . . .

THE FRED. W. MUTH CO.
Pearl and Walnut Cincinnati, Ohio

WHEN WRITING TO ADVERTISERS, MENTION GLEANINGS

KELLEY—"The Bee Man"

Order Now

Raw materials are hard to secure and prices are advancing. We have cancelled all catalog prices and made moderate increases but prices will be still higher next year.

The Walter T. Kelley Co., Paducah, Ky.

MANY MANY THANKS

To our customers and all others who have helped make 1941 the best and biggest beekeeping year in our history.

We will be ready to furnish you quantity and quality bees in 1942. Keep us in mind.

BOLLING BEE CO., Bolling, Ala.

Three-Banded Italian Package Bees and Queens

for 1942

THE CROWVILLE APIARIES
Rt. 1, Winnsboro, La.

WANTED—White and amber extracted honey. Fancy comb, also No. 1 comb honey. Comb honey in shallow extracting frames. Beeswax. We render old comb into wax. Prompt remittance. Write us.
THE FRED W. MUTH CO. • CINCINNATI, O.

WANTED--Extracted Honey All Varieties
Send samples and delivered prices to
JEWETT & SHERMAN COMPANY
Cleveland, Kansas City and Brooklyn.

MORLEY PETTIT

thanks his many friends and customers for good package bee trade.
We have tried hard to give good service and believe no other shipper has done better.
Have plenty of good queens for all comers. 1-11, 55c; 12-23, 50c; 24-49, 45c; 50-up, 40c.
Let us take care of your requeening needs.
Write us when planning for 1942 packages.
MORLEY PETTIT **Tifton, Georgia**

QUEENS FOR QUALITY

(Continued from page 684)

condition for a period of five hours, long enough for the bees to become aware of their queenless condition. After the queen and unhatched brood have been removed, the remaining nurse and field bees should be sprinkled with a 50% sugar syrup so that they will gorge themselves with food. The bees, hopelessly queenless for a period of 5 hours, with no larvae from which to start construction of another queen cell, are in excellent readiness to accept the grafted cells. Then the nurse bees, gorged with royal jelly manufactured from the ample supply of sugar syrup, feed it lavishly to the larvae which have been introduced into the hive. After the cells have been accepted and the cocoons have been spun, the frame of cells should be removed and inspected for small mis-shapen cells. The small cells should be discarded, only the largest ones being kept for requeening. The feeding of sugar syrup should continue for a three or four day period to make possible an ample supply of royal jelly for all of the grafted larvae.

When the technique just described was used, it was found that 50 grafted cells were consistently accepted and finished by the same colony during one grafting. Also, the resulting queens were large and of highest quality. When the colonies were forced to finish more than 100 cells, the resulting queens were of an inferior grade.

Fancy, medium, or poor? The beekeeper who rears his own queens from selected stock will have U. S. No. 1 quality bees and an increase in honey production he hadn't thought possible.

Columbus, Ohio.

Carefully Selected Italian

QUEENS---50c

Write or Wire Your Orders. Prompt Service Guaranteed.

The Puett Company, Hahira, Georgia

LOSSES OF BEES FROM POISON IN UTAH

(Continued from page 685)

Fruit-spraying operations which are fairly heavy throughout the entire summer seem a more logical major cause of serious bee losses in the affected sections of Utah than grasshopper bait.

The remote possibility exists that irrigation water may be contaminated by grasshopper bait or orchard spray, or both.

Colonies in the sugar beet area suffered heavy losses in the years the beets were sprayed with Paris Green but not in 1940 when no spray was applied. Some of the apiaries where losses occurred in previous years also were within range of orchard spraying.

Arsenical dusting as practiced in Utah for control of the tomato fruit worm seems an unlikely cause of bee poisoning since honeybees were never observed visiting tomato blossoms.

No infectious diseases of bees were found.

Loco weed, heavily distributed in parts of Utah, is believed to have caused serious plant poisoning of honeybees in Beaver and Iron Counties in 1932, but the severe losses of the past few years have occurred mainly after these species were through blooming.

Bee losses in the area of smelters are puzzling since most of the arsenic in the fumes is being trapped.

THE HOFFMAN FRAME

(Continued from page 695)

closed-end frames I can manipulate in less time, stir up the bees less, find a queen in far less time, and do not have to stop to scrape off bee-glue. I know today that I have hives with Hoffman frames where there are only nine frames because I could not spare the time to force the tenth frame in, and today those 1⅜ frames are some of them spaced 1½ or more because of great accumulations of bee-glue. I have given up trying to keep those frames clean. I think in some case one could scrape off a full pint of bee-glue from the end-bars of one hive. In those hives I have almost given up manipulation of frames. I simply glance up between the bottom-bars to see the colony condition. When a queen must be found she is drummed up against the excluder.

Must coming generations of beekeepers be subjected to the curse of the Hoffman frame? Why, since there can be a frame so much more desirable, should this be? I will close with a statement that is absolutely true. If the makers of the Hoffman frame will cease to make the V-edge and will leave both edges square they will in time receive the blessing of every honest beekeeper.

Norwichtown, Conn.

PATENTS & TRADEMARKS
Williamson & Walton
Munsey Building
Washington, D. C.

Our two breeds of queens as previously advertised will be produced until late Fall. The same Fine Quality and Reasonable prices will apply.
Prices: 1 to 15 at 40c each. From 16 and upwards at 35c each.
GARON BEE COMPANY, Donaldsonville, La.

HONEY CONTAINERS

No advance in prices at present
(5-lb. Glass Honey Pail, big hit—6 for 50c)
Send Order Now

Root QUALITY BEE SUPPLIES

THE A. I. ROOT CO.
12 W. 21st St., NEW YORK CITY
Prices on Bee Supplies advanced Sept. 1.
Write for new prices.

XUM

Root QUALITY

Three-Ply Airco Foundation

Pays Big Dividends

Maximum number of worker cells
Will not sag---Will not melt down

The A. I. Root Company
Medina, Ohio

(We are always in the market for Beeswax)

INDEX TO DISPLAY ADVERTISEMENTS

American Bee Journal 675
American Honey Institute 674
Australasian Beekeeper 671
Beekeepers Item 675
Bolling Bee Co. 730
Calvert Apiaries 729
Caucasian Apiaries 726
Crowville Apiaries 730
Dadant & Sons 676
Garon Bee Co. 731
Hann, Albert G. 726
Hunt & Son, M. H. 675
Jewett & Sherman Co. 730
Kelley Co., The Walter T. 729
Lotz Co., August 671
Magazine Mart 675
Muth Co., The Fred W. .670, 729 730
Pettit, Morley 730
Puett Co. 730
Root Co., The A. I. ....Cover pages
Root Co. of Chicago, A. I. 671
Root Co. of Indianapolis, A. I. ..670
Root Co. of New York, A. I. 731
Root Co. of Norfolk, A. I. 671
Root Co. of Syracuse, A. I. 670
Rossman & Long 726
Stover Apiaries 729
Weaver Apiaries 726
Woodman Co., A. G. 671
York Bee Co. 726